

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Comugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 22, 2004, 06:45:50 ; Search time 35 Seconds
(without alignments)
3.942 Million cell updates/sec

Title: us-09-555-640-1

Perfect score: 5028
Sequence: 1 gacgcacaggaatgacgt.....agctatctcctgtacgctc 5028

Scoring table: IDENTITY_NTC
Gapop 10.0 , Gapext 0.5

Searched: 103 seqs, 13720 residues

Total number of hits satisfying chosen parameters: 206

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 250 summaries

Database : US09555640.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2343	46.6	2343	1	US-09-555-640-85
2	2013	40.0	2013	1	US-09-555-640-81
3	1662	33.1	1662	1	US-09-555-640-91
4	725	14.4	725	1	US-09-555-640-74
5	681	13.5	681	1	US-09-555-640-87
6	670	13.3	670	1	US-09-555-640-50
7	396	7.9	396	1	US-09-555-640-93
8	306	6.1	306	1	US-09-555-640-89
9	260	5.2	260	1	US-09-555-640-80
10	255	5.1	255	1	US-09-555-640-72
11	222	4.4	222	1	US-09-555-640-83
12	210	4.2	210	1	US-09-555-640-45
13	183	3.6	183	1	US-09-555-640-49
14	180	3.6	180	1	US-09-555-640-77
15	152	3.0	152	1	US-09-555-640-79
16	134	2.7	134	1	US-09-555-640-59
17	117	2.3	117	1	US-09-555-640-48
18	114	2.3	114	1	US-09-555-640-63
19	109	2.2	109	1	US-09-555-640-43
20	104	2.1	109	1	US-09-555-640-43
21	103	2.0	103	1	US-09-555-640-44
22	103	2.0	103	1	US-09-555-640-44
23	102	2.0	102	1	US-09-555-640-62
24	100	2.0	100	1	US-09-555-640-47
25	100	2.0	100	1	US-09-555-640-58
26	98	1.9	98	1	US-09-555-640-58
27	84	1.7	84	1	US-09-555-640-53
28	76	1.5	76	1	US-09-555-640-55
29	64	1.3	64	1	US-09-555-640-11
30	64	1.3	64	1	US-09-555-640-78
31	62	1.2	62	1	US-09-555-640-39
32	60	1.2	60	1	US-09-555-640-54
33	56	1.1	56	1	US-09-555-640-68

34	55	1.1	55	1	US-09-555-640-13	Sequence 13, App1
35	53	1.1	53	1	US-09-555-640-26	Sequence 26, App1
36	51	1.0	51	1	US-09-555-640-69	Sequence 69, App1
37	49	1.0	49	1	US-09-555-640-22	Sequence 22, App1
38	49	1.0	49	1	US-09-555-640-75	Sequence 75, App1
39	47	0.9	47	1	US-09-555-640-21	Sequence 21, App1
40	46	0.9	46	1	US-09-555-640-52	Sequence 52, App1
41	43	0.9	43	1	US-09-555-640-19	Sequence 19, App1
42	42	0.8	42	1	US-09-555-640-71	Sequence 71, App1
43	39	0.8	39	1	US-09-555-640-23	Sequence 23, App1
44	39	0.8	39	1	US-09-555-640-67	Sequence 67, App1
45	37	0.7	37	1	US-09-555-640-70	Sequence 70, App1
46	36	0.7	36	1	US-09-555-640-51	Sequence 51, App1
47	35	0.7	35	1	US-09-555-640-121	Sequence 121, App
48	35	0.7	35	1	US-09-555-640-4	Sequence 4, App1
49	34	0.7	34	1	US-09-555-640-37	Sequence 37, App1
50	33	0.7	33	1	US-09-555-640-73	Sequence 73, App1
51	32	0.6	32	1	US-09-555-640-30	Sequence 30, App1
52	31	0.6	31	1	US-09-555-640-8	Sequence 8, App1
53	30	0.6	30	1	US-09-555-640-41	Sequence 41, App1
54	30	0.6	30	1	US-09-555-640-46	Sequence 46, App1
55	30	0.6	30	1	US-09-555-640-56	Sequence 56, App1
56	30	0.6	30	1	US-09-555-640-61	Sequence 61, App1
57	30	0.6	30	1	US-09-555-640-66	Sequence 66, App1
58	30	0.6	30	1	US-09-555-640-76	Sequence 76, App1
59	29.6	0.6	670	1	US-09-555-640-50	Sequence 50, App1
60	29.6	0.6	2013	1	US-09-555-640-81	Sequence 81, App1
61	29	0.6	29	1	US-09-555-640-3	Sequence 3, App1
62	29	0.6	29	1	US-09-555-640-40	Sequence 40, App1
63	28	0.6	28	1	US-09-555-640-57	Sequence 57, App1
64	26.4	0.5	255	1	US-09-555-640-72	Sequence 72, App1
65	26.4	0.5	260	1	US-09-555-640-80	Sequence 80, App1
66	26.4	0.5	1662	1	US-09-555-640-91	Sequence 91, App1
67	26.4	0.5	2343	1	US-09-555-640-85	Sequence 85, App1
68	26	0.5	26	1	US-09-555-640-16	Sequence 16, App1
69	26	0.5	26	1	US-09-555-640-33	Sequence 33, App1
70	26	0.5	25	1	US-09-555-640-12	Sequence 12, App1
71	25	0.5	24	1	US-09-555-640-15	Sequence 15, App1
72	24	0.5	24	1	US-09-555-640-32	Sequence 32, App1
73	24	0.5	23	1	US-09-555-640-10	Sequence 10, App1
74	23	0.5	23	1	US-09-555-640-25	Sequence 25, App1
75	23	0.5	23	1	US-09-555-640-27	Sequence 27, App1
76	23	0.5	23	1	US-09-555-640-29	Sequence 29, App1
77	23	0.5	23	1	US-09-555-640-35	Sequence 35, App1
78	23	0.5	23	1	US-09-555-640-38	Sequence 38, App1
79	23	0.5	23	1	US-09-555-640-46	Sequence 46, App1
80	23	0.5	23	1	US-09-555-640-49	Sequence 49, App1
81	22.4	0.4	183	1	US-09-555-640-93	Sequence 93, App1
82	22.4	0.4	725	1	US-09-555-640-74	Sequence 74, App1
83	22.2	0.4	396	1	US-09-555-640-94	Sequence 94, App1
84	22.2	0.4	22	1	US-09-555-640-24	Sequence 24, App1
85	22	0.4	22	1	US-09-555-640-64	Sequence 64, App1
86	21.4	0.4	681	1	US-09-555-640-87	Sequence 87, App1
87	21	0.4	21	1	US-09-555-640-7	Sequence 7, App1
88	21	0.4	21	1	US-09-555-640-36	Sequence 36, App1
89	21	0.4	21	1	US-09-555-640-42	Sequence 42, App1
90	21	0.4	21	1	US-09-555-640-106	Sequence 106, App
91	21	0.4	21	1	US-09-555-640-110	Sequence 110, App
92	21	0.4	21	1	US-09-555-640-115	Sequence 115, App
93	21	0.4	29	1	US-09-555-640-119	Sequence 119, App
94	21	0.4	33	1	US-09-555-640-117	Sequence 117, App
95	20.6	0.4	20	1	US-09-555-640-5	Sequence 5, App1
96	20	0.4	20	1	US-09-555-640-6	Sequence 6, App1
97	20	0.4	20	1	US-09-555-640-14	Sequence 14, App1
98	20	0.4	20	1	US-09-555-640-31	Sequence 31, App1
99	20	0.4	20	1	US-09-555-640-107	Sequence 107, App
100	20	0.4	20	1	US-09-555-640-112	Sequence 112, App
101	20	0.4	20	1	US-09-555-640-116	Sequence 116, App
102	20	0.4	76	1	US-09-555-640-55	Sequence 55, App1
103	19.8	0.4	152	1	US-09-555-640-79	Sequence 79, App1
104	19.6	0.4	114	1	US-09-555-640-63	Sequence 63, App1
105	19.4	0.4				
106						

```
107 19 0.4 19 1 US-09-555-640-18 Sequence 18, App1
108 19 0.4 19 1 US-09-555-640-20 Sequence 20, App1
109 19 0.4 19 1 US-09-555-640-105 Sequence 105, App
110 19 0.4 19 1 US-09-555-640-108 Sequence 108, App
111 19 0.4 19 1 US-09-555-640-111 Sequence 111, App
112 19 0.4 19 1 US-09-555-640-113 Sequence 113, App
113 19 0.4 19 1 US-09-555-640-114 Sequence 114, App
114 19 0.4 26 1 US-09-555-640-118 Sequence 118, App
115 19 0.4 26 1 US-09-555-640-120 Sequence 120, App
116 18.4 0.4 222 1 US-09-555-640-83 Sequence 83, App1
117 18.4 0.4 306 1 US-09-555-640-89 Sequence 89, App1
118 18 0.4 53 1 US-09-555-640-17 Sequence 17, App1
119 18 0.4 18 1 US-09-555-640-26 Sequence 26, App1
120 18 0.4 18 1 US-09-555-640-34 Sequence 34, App1
121 17.6 0.4 98 1 US-09-555-640-58 Sequence 58, App1
122 17.4 0.3 180 1 US-09-555-640-77 Sequence 77, App1
123 17.2 0.3 34 1 US-09-555-640-37 Sequence 37, App1
124 17 0.3 134 1 US-09-555-640-9 Sequence 9, App1
125 16.2 0.3 102 1 US-09-555-640-59 Sequence 59, App1
126 16 0.3 210 1 US-09-555-640-62 Sequence 62, App1
127 16 0.3 62 1 US-09-555-640-45 Sequence 45, App1
128 15.6 0.3 100 1 US-09-555-640-39 Sequence 39, App1
129 15.6 0.3 100 1 US-09-555-640-47 Sequence 47, App1
130 15.6 0.3 100 1 US-09-555-640-60 Sequence 60, App1
131 15.6 0.3 117 1 US-09-555-640-48 Sequence 48, App1
132 15.2 0.3 36 1 US-09-555-640-51 Sequence 51, App1
133 14.8 0.3 84 1 US-09-555-640-53 Sequence 53, App1
134 14.4 0.3 21 1 US-09-555-640-36 Sequence 36, App1
135 14.4 0.3 46 1 US-09-555-640-52 Sequence 52, App1
136 14.4 0.3 49 1 US-09-555-640-75 Sequence 75, App1
137 14 0.3 64 1 US-09-555-640-78 Sequence 78, App1
138 13.6 0.3 51 1 US-09-555-640-69 Sequence 69, App1
139 13.6 0.3 60 1 US-09-555-640-54 Sequence 54, App1
140 13.4 0.3 39 1 US-09-555-640-67 Sequence 67, App1
141 13.4 0.3 55 1 US-09-555-640-13 Sequence 13, App1
142 13.2 0.3 47 1 US-09-555-640-61 Sequence 61, App1
143 13.2 0.3 64 1 US-09-555-640-21 Sequence 21, App1
144 13.2 0.3 31 1 US-09-555-640-8 Sequence 8, App1
145 13 0.3 33 1 US-09-555-640-73 Sequence 73, App1
146 13 0.3 32 1 US-09-555-640-30 Sequence 30, App1
147 12.8 0.3 23 1 US-09-555-640-29 Sequence 29, App1
148 12.2 0.2 35 1 US-09-555-640-4 Sequence 4, App1
149 12.2 0.2 49 1 US-09-555-640-22 Sequence 22, App1
150 12.2 0.2 20 1 US-09-555-640-5 Sequence 5, App1
151 12 0.2 23 1 US-09-555-640-25 Sequence 25, App1
152 12 0.2 23 1 US-09-555-640-35 Sequence 35, App1
153 12 0.2 26 1 US-09-555-640-33 Sequence 33, App1
154 12 0.2 30 1 US-09-555-640-46 Sequence 46, App1
155 12 0.2 37 1 US-09-555-640-70 Sequence 70, App1
156 12 0.2 56 1 US-09-555-640-68 Sequence 68, App1
157 12 0.2 24 1 US-09-555-640-32 Sequence 32, App1
158 11.8 0.2 36 1 US-09-555-640-121 Sequence 121, App1
159 11.8 0.2 42 1 US-09-555-640-71 Sequence 71, App1
160 11.6 0.2 43 1 US-09-555-640-19 Sequence 19, App1
161 11.6 0.2 21 1 US-09-555-640-106 Sequence 106, App
162 11.4 0.2 33 1 US-09-555-640-24 Sequence 117, App
163 11.4 0.2 22 1 US-09-555-640-10 Sequence 10, App1
164 11.2 0.2 23 1 US-09-555-640-18 Sequence 18, App1
165 11.2 0.2 19 1 US-09-555-640-107 Sequence 107, App
166 11 0.2 20 1 US-09-555-640-40 Sequence 40, App1
167 11 0.2 29 1 US-09-555-640-112 Sequence 112, App
168 10.8 0.2 23 1 US-09-555-640-38 Sequence 38, App1
169 10.8 0.2 29 1 US-09-555-640-66 Sequence 66, App1
170 10.8 0.2 30 1 US-09-555-640-23 Sequence 23, App1
171 10.8 0.2 26 1 US-09-555-640-6 Sequence 6, App1
172 10.6 0.2 28 1 US-09-555-640-57 Sequence 57, App1
173 10.6 0.2 26 1 US-09-555-640-56 Sequence 56, App1
174 10.2 0.2 18 1 US-09-555-640-34 Sequence 34, App1
175 10.2 0.2 21 1 US-09-555-640-42 Sequence 42, App1
176 10.2 0.2 21 1 US-09-555-640-42 Sequence 42, App1
177 10.2 0.2 21 1 US-09-555-640-42 Sequence 42, App1
178 10.2 0.2 21 1 US-09-555-640-42 Sequence 42, App1
179 10.2 0.2 21 1 US-09-555-640-42 Sequence 42, App1
```

```

QY 2696 GTTAGCATCAATTACCCGGTACTAATATGTTGGCCCTGGCAATGAGCTACAGCTGGG 2755
DB 361 GTTAGCATCAATTACCCGGTACTAATATGTTGGCCCTGGCAATGAGCTACAGCTGGG 420
QY 2756 CCTCCGAGAAATCTGTGGAAGTGTGCAAGGATTCATGACTTTAGTATGCCAATTTG 2815
DB 421 CCTCCGAGAAATCTGTGGAAGTGTGCAAGGATTCATGACTTTAGTATGCCAATTTG 480
QY 2816 GCTAAATGGGAAATTAATCCTTTATACATTTGACGCTGACATGAATGAATTTGTTAAA 2875
DB 481 GCTAAATGGGAAATTAATCCTTTATACATTTGACGCTGACATGAATGAATTTGTTAAA 540
QY 2876 AATATATAAATAATGAAACAGGGTTTCAAGCAAGCAGTAAAGATTACTTTAATTA 2935
DB 541 AATATATAAATAAACAAGGTTTCAAGCAAGCAGTAAAGATTACTTTAATTA 600
QY 2936 GGTGAGCTGCCCCCTGTGGCCATTTTCAAGAAAGTTTACCGGAAGTCCCGGTAAC 2995
DB 601 GGTGAGCTGCCCCCTGTGGCCATTTTCAAGAAAGTTTACCGGAAGTCCCGGTAAC 660
QY 2996 GCTTCAGAAAATAATCCCGAGCATGACTTCAGTTAATCTTCAGAAAGCCAGCATGCTGCA 3055
DB 661 GCTTCAGAAAATAATCCCGAGCATGACTTCAGTTAATCTTCAGAAAGCCAGCATGCTGCA 720
QY 3056 GGGGGGGAGGTAGCAACCTTACAAAAGCATGTGAGTGAAGGGCTACTATTACTGCT 3115
DB 721 GGGGGGGAGGTAGCAACCTTACAAAAGCATGTGAGTGAAGGGCTACTATTACTGCT 780
QY 3116 AATTCGTAAACGTGACATTTCTAGGCAATTTTAAATTCATATGATCCAGACATCAT 3175
DB 781 AATTCGTAAACGTGACATTTCTAGGCAATTTTAAATTCATATGATCCAGACATCAT 840
QY 3176 TATTAAGTGTCTCTCCAGAGCTAGTAGTGCACAAATCTGTGGAAAGGCAAAA 3235
DB 841 TATTAAGTGTCTCTCCAGAGCTAGTAGTGCACAAATCTGTGGAAAGGCAAAA 900
QY 3236 GTGTGCACTATTAGTCCCATTTATGGGGTACTACTCCGTGGAGATTAAGATTAAAT 3295
DB 901 GTGTGCACTATTAGTCCCATTTATGGGGTACTACTCCGTGGAGATTAAGATTAAAT 960
QY 3296 GCTTTAAATTTGTTTCTCACCATTAGAGTTTCAAGCATTTAATTTAGTATG 3355
DB 961 GCTTTAAATTTGTTTCTCACCATTAGAGTTTCAAGCATTTAATTTAGTATG 1020
QY 3356 ATAGCTCCAGATCTTTAATCTGTAATCTTTCAAGAAATCTGTAAAGTGCACAGAC 3415
DB 1021 ATAGCTCCAGATCTTTAATCTGTAATCTTTCAAGAAATCTGTAAAGTGCACAGAC 1080
QY 3416 AAAACAGAGAGGTGTGCAAGTTAATCTGACAGACCAAGAGCTTTGTATGTTAGT 3475
DB 1081 AAAACAGAGAGGTGTGCAAGTTAATCTGACAGACCAAGAGCTTTGTATGTTAGT 1140
QY 3476 GATCATGATTAATTAATCCATATGTGCTAGTCAAGGACAAAGCACTAGCTCCAGAA 3535
DB 1141 GATCATGATTAATTAATCCATATGTGCTAGTCAAGGACAAAGCACTAGCTCCAGAA 1200
QY 3536 CTGCCATTTGGGTTTACTTTCCCGCCAGATAGCTTACTTAAACAGTAGTGAATTAAC 3595
DB 1201 CTGCCATTTGGGTTTACTTTCCCGCCAGATAGCTTACTTAAACAGTAGTGAATTAAC 1260
QY 3596 ACAAGAGAAATTCAGAGACAGCAAAAATTTGGCTAGTGAAGAAATCAGCTTTTATGT 3655
DB 1261 ACAAGAGAAATTCAGAGACAGCAAAAATTTGGCTAGTGAAGAAATCAGCTTTTATGT 1320
QY 3656 TTAGACACAGTTCAATTTGAATTTTGGGTACAGGGGATCTGCACTATGCTTACAA 3715
DB 1321 TTAGACACAGTTCAATTTGAATTTTGGGTACAGGGGATCTGCACTATGCTTACAA 1380
QY 3716 TTTTCAGCTGTGCCCCCAAGAAACCTAGAAAGCTGACAGCCAACTTTTATGAATGTAC 3775
DB 1381 TTTTCAGCTGTGCCCCCAAGAAACCTAGAAAGCTGACAGCCAACTTTTATGAATGTAC 1440
QY 3776 AACCTTTGTAAGTTCTCGTTTAAAGGGTACTGACACATTTAGAGGGAGCCTTAATTT 3835

```

```

DB 1441 AACCTTTGTAAGTTCTCGTTTAAAGGGTACTGACACATTTAGAGGGAGCCTTAATTT 1500
QY 3836 AGATCATTAACACAGAAACCAAGCAATTCAGCCCAAAACTTTATGCTGGCCACTA 3895
DB 1501 AGATCATTAACACAGAAACCAAGCAATTCAGCCCAAAACTTTATGCTGGCCACTA 1560
QY 3896 ATTAATTCAGTGTCTACCAAGAAAGAGACATTTCTAATACAGGTGCTGAAAAGCCTT 3955
DB 1561 ATTAATTCAGTGTCTACCAAGAAAGAGACATTTCTAATACAGGTGCTGAAAAGCCTT 1620
QY 3956 ACGGGCTTATGTAATGCACTAGCCAAACACACAGAAATTTCCCTAGCCCGGGCAGTA 4015
DB 1621 ACGGGCTTATGTAATGCACTAGCCAAACACACAGAAATTTCCCTAGCCCGGGCAGTA 1680
QY 4016 TCTCAGCCATTAACATCACTGGGACACTGATTAATATGTTTACAGAAATTAATGCAATTTCA 4075
DB 1681 TCTCAGCCATTAACATCACTGGGACACTGATTAATATGTTTACAGAAATTAATGCAATTTCA 1740
QY 4076 CATGACAAACGACTTATGGAATGCTGAGCAAAAGATATCAGCAAGGGGTAGGAAG 4135
DB 1741 CATGACAAACGACTTATGGAATGCTGAGCAAAAGATATCAGCAAGGGGTAGGAAG 1800
QY 4136 TTTCCAAATGAAAAGAAACAGCTTAAGCAGTTACAAAGTCTTTAACATGACACATATCTTC 4195
DB 1801 TTTCCAAATGAAAAGAAACAGCTTAAGCAGTTACAAAGTCTTTAACATGACACATATCTTC 1860
QY 4196 CCTAATTAAGAAACCCCAATACACAGCAACCAATTAAGCCCTCTTTATGCTGGCTCT 4255
DB 1861 CCTAATTAAGAAACCCCAATACACAGCAACCAATTAAGCCCTCTTTATGCTGGCTCT 1920
QY 4256 GTTTGGAACAGAAAGCTCTTCACTATGAAGTCAAGCTGTGAGTAAATCCCTAATCTTA 4315
DB 1921 GTTTGGAACAGAAAGCTCTTCACTATGAAGTCAAGCTGTGAGTAAATCCCTAATCTTA 1980
QY 4316 GATGACAGTTTAAATCTCAATTTGAGCCCTAGCGGGTGGGTTTGTGATCAACCAACC 4375
DB 1981 GATGACAGTTTAAATCTCAATTTGAGCCCTAGCGGGTGGGTTTGTGATCAACCAACC 2040
QY 4376 CCTCAAAATATTTTAAATAATCTACCACAAAGTGGCCATTTGAGGATTAATTCATG 4435
DB 2041 CCTCAAAATATTTTAAATAATCTACCACAAAGTGGCCATTTGAGGATTAATTCATG 2100
QY 4436 GGAATTAATCTTTGTTGTTCAATATGCTGTGGGAATTAATGACAGTTACATGACCTTAA 4495
DB 2101 GGAATTAATCTTTGTTGTTCAATATGCTGTGGGAATTAATGACAGTTACATGACCTTAA 2160
QY 4496 TTGGGACCTGAAAGGCTACTGAAAGTGAATCCCAAGCTGCGCTTATCTCTCAT 4555
DB 2161 TTGGGACCTGAAAGGCTACTGAAAGTGAATCCCAAGCTGCGCTTATCTCTCAT 2220
QY 4556 GCAAGCTGTCTATTAATCATATGTAATGTAAGCCCAAGCTACAGATCAAGCAACAC 4615
DB 2221 GCAAGCTGTCTATTAATCATATGTAATGTAAGCCCAAGCTACAGATCAAGCAACAC 2280
QY 4616 CACAGACAGGATTAATGAAGCTGAAAGTGTGAGCTGCCAAAGCCGTGTGACCCA 4675
DB 2281 CACAGACAGGATTAATGAAGCTGAAAGTGTGAGCTGCCAAAGCCGTGTGACCCA 2340
QY 4676 TTG 4678
DB 2341 TTG 2343

```

```

RESULT 2
US-09-555-640-81
; Sequence 81, Application us/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang T-Ti
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications

```

FILE REFERENCE: 45636-5033-US
 CURRENT APPLICATION NUMBER: US/09/555,640
 CURRENT FILING DATE: 2000-08-10

Query Match 40.0%; Score 2013; DB 1; Length 2013;
 Best Local Similarity 100.0%; Pred. No. 4e-27;
 Matches 2013; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 328 ATGAGCTAATTCGGGGGCTGCTTCCCTTAACATTCCTGACATCTGTCTAATGAT 387
DB 1 ATGAGCTAATTCGGGGGCTGCTTCCCTTAACATTCCTGACATCTGTCTAATGAT 60
QY 388 AACTGGGTGCTGCTTAAGCTTAAGTACTTGTGACTGGAGACCACTAACCTATCT 447
DB 61 AACTGGGTGCTGCTTAAGCTTAAGTACTTGTGACTGGAGACCACTAACCTATCT 120
QY 448 AACGATTAATGCGAATATATTAAGCAGGTGCTTCTTAACCTGATTTTACTGGGGG 507
DB 121 AACGATTAATGCGAATATATTAAGCAGGTGCTTCTTAACCTGATTTTACTGGGGG 180
QY 508 CCGCTAGCAGGTGCTTAATCTTTTTCAGTGGAAATGTAACAATTTGAGGAAGCTAT 567
DB 181 CCGCTAGCAGGTGCTTAATCTTTTTCAGTGGAAATGTAACAATTTGAGGAAGCTAT 240
QY 568 CATATCATGTAGTATATGTTGGTCCAGAGCTAAATGCTAGAACTTAACTGTGCTGA 627
DB 241 CATATCATGTAGTATATGTTGGTCCAGAGCTAAATGCTAGAACTTAACTGTGCTGA 300
QY 628 GAAGGTTTATTAATATGTTCTTTACATCTTGTACTGAAGAGTTAACTTAAATTT 687
DB 301 GAAGGTTTATTAATATGTTCTTTACATCTTGTACTGAAGAGTTAACTTAAATTT 360
QY 688 TTGCCAGGATGACTACCAAGAGAAATTTTAAAGATGAGAGCGCTTTAAGAAAT 747
DB 361 TTGCCAGGATGACTACCAAGAGAAATTTTAAAGATGAGAGCGCTTTAAGAAAT 420
QY 748 TACTTAAGAAAAAATTCCTTTAAATGTTGTTGTTGTTGAACAATTTGACGGGTAT 807
DB 421 TACTTAAGAAAAAATTCCTTTAAATGTTGTTGTTGTTGAACAATTTGACGGGTAT 480
QY 808 ATAGACACTGTATTCGGGCTTTTTCGGGAGAGAGCTGTCAATGCTAAAGACCCCG 867
DB 481 ATAGACACTGTATTCGGGCTTTTTCGGGAGAGAGCTGTCAATGCTAAAGACCCCG 540
QY 868 ATTACTGCAAAATACAGACAGTCTACTAATGAATCTGGGAGTCTGCTGAGAGGGGA 927
DB 541 ATTACTGCAAAATACAGACAGTCTACTAATGAATCTGGGAGTCTGCTGAGAGGGGA 600
QY 928 GATGTTGCGCATTCGCTGGAAGAGGAAACAAAGCGGGTTAAAGTTTCAACCATGCTA 987
DB 601 GATGTTGCGCATTCGCTGGAAGAGGAAACAAAGCGGGTTAAAGTTTCAACCATGCTA 660
QY 988 AATTGGCTATGTGAAAAACAGAGTATTTTCTGAAGATTAATGGAATTTATGATTTTAC 1047
DB 661 AATTGGCTATGTGAAAAACAGAGTATTTTCTGAAGATTAATGGAATTTATGATTTTAC 720
QY 1048 CAATATATCTTTAATAGTAGCACTCAAGTGGCAGCTTCAAAATTCAAAGTGCCTTAAAG 1107
DB 721 CAATATATCTTTAATAGTAGCACTCAAGTGGCAGCTTCAAAATTCAAAGTGCCTTAAAG 780
QY 1108 TTAGCTATTTAATAAGCTACTAAGTACCACTAGTACATTTTGTGTACTTCAAGAC 1167
DB 781 TTAGCTATTTAATAAGCTACTAAGTACCACTAGTACATTTTGTGTACTTCAAGAC 840
QY 1168 TTGAGCAGGTACTTGTCAATTAAGAAAAATTAATTAATTAATTTATGTGTCAAAAC 1227
DB 841 TTGAGCAGGTACTTGTCAATTAAGAAAAATTAATTAATTAATTTATGTGTCAAAAC 900
QY 1228 TATGATCCTCTTTTATGAGGTCAACATGTTAAGTGAATTTGACAAAAATGTGTAAA 1287
DB 901 TATGATCCTCTTTTATGAGGTCAACATGTTAAGTGAATTTGACAAAAATGTGTAAA 960
QY 1288 AAAAAACCCCTGTGTTTATGAGGCGCAACAAAGTACTGGAATAAAATTTGGCAATGGCT 1347

```

```

DB 961 AAAAAACCCCTGTGTTTATGAGGCGCAACAAAGTACTGGAATAAAATTTGGCAATGGCT 1020
QY 1348 ATTGCTAAACTGTACCAAGTATAGAAATGTGAATTTGAAATTAATGAAAACTTTCATTT 1407
DB 1021 ATTGCTAAACTGTACCAAGTATAGAAATGTGAATTTGAAATTAATGAAAACTTTCATTT 1080
QY 1408 AATGATGAGCGGGGAAATTTTGTGTCTGTGGATGAAGGCAATTAATAGTCACTAAT 1467
DB 1081 AATGATGAGCGGGGAAATTTTGTGTCTGTGGATGAAGGCAATTAATAGTCACTAAT 1140
QY 1468 GTGGAAGCTCAAAAGCAATTTTATGAGTGTGACCCCAACAGGGTGTGATCAAGAAATGCGT 1527
DB 1141 GTGGAAGCTCAAAAGCAATTTTATGAGTGTGACCCCAACAGGGTGTGATCAAGAAATGCGT 1200
QY 1528 GGCAGGTGCGAGTGGCCCGTGTGCTGTGTTAATACAGCAATGTGATTAATTTT 1587
DB 1201 GGCAGGTGCGAGTGGCCCGTGTGCTGTGTTAATACAGCAATGTGATTAATTTT 1260
QY 1588 GTTGTAGTGTAAATACACTCAACATGTGCAATGCTAAAGCTTAAAGGAACGATGTA 1647
DB 1261 GTTGTAGTGTAAATACACTCAACATGTGCAATGCTTAAAGCTTAAAGGAACGATGTA 1320
QY 1648 AAGCTAACTTTTACCAATAGATGATGCTTGAATGAGGTTTACTTACAGAGGCTGATGA 1707
DB 1321 AAGCTAACTTTTACCAATAGATGATGCTTGAATGAGGTTTACTTACAGAGGCTGATGA 1380
QY 1708 CAACAATGCTAACTTGTGTATGCAACAAGCTGAGGCCACTATGAAAATCTGGCAATA 1767
DB 1381 CAACAATGCTAACTTGTGTATGCAACAAGCTGAGGCCACTATGAAAATCTGGCAATA 1440
QY 1768 AACTCACAATTTGATTTTCCCTGAAATTAATGCAATGCTTCAACCAAGCTTCAAAAC 1827
DB 1441 AACTCACAATTTGATTTTCCCTGAAATTAATGCAATGCTTCAACCAAGCTTCAAAAC 1500
QY 1828 ACCCCATTTGCCAGACACCAAGTATGAGAGAGCTTGAACAGTCACTGGAAGATCTC 1887
DB 1501 ACCCCATTTGCCAGACACCAAGTATGAGAGAGCTTGAACAGTCACTGGAAGATCTC 1560
QY 1888 AGTGAAGCAGCTTTTCAACTTCATCATCTCAAGGCGCTGGAACAGTAAACCCCGGCG 1947
DB 1561 AGTGAAGCAGCTTTTCAACTTCATCATCTCAAGGCGCTGGAACAGTAAACCCCGGCG 1620
QY 1948 TCTAGTACGCCCGTCCCGGGAACAGTCAAGGAATCATTTGTGGAAGCCAGTTTCC 2007
DB 1621 TCTAGTACGCCCGTCCCGGGAACAGTCAAGGAATCATTTGTGGAAGCCAGTTTCC 1680
QY 2008 TCCGAATGATGACCGCGTGTGAGGAGAACTTTTACAGCCGCTTGGCGATGATTT 2067
DB 1681 TCCGAATGATGACCGCGTGTGAGGAGAACTTTTACAGCCGCTTGGCGATGATTT 1740
QY 2068 CGTGAACGTGTATAGAGGTTGACTTTGTATGGAATGTTGAGAGGGAATTCCTGTTTGC 2127
DB 1741 CGTGAACGTGTATAGAGGTTGACTTTGTATGGAATGTTGAGAGGGAATTCCTGTTTGC 1800
QY 2128 TGTGTGAAACATTAATAACAAGTGGGAGAGGTTGGGCTTTGGCCCTCATTTATTAAT 2187
DB 1801 TGTGTGAAACATTAATAACAAGTGGGAGAGGTTGGGCTTTGGCCCTCATTTATTAAT 1860
QY 2188 GTGGAGCTGTGATTAATGAGATGGAATTTTGAAGATTTACTGCAACTTATGTCGTGC 2247
DB 1861 GTGGAGCTGTGATTAATGAGATGGAATTTTGAAGATTTACTGCAACTTATGTCGTGC 1920
QY 2248 AGTTGTCATGTAGAGCCTTCAACCATTTTCTGTGTTAATCTTGAATAAATGTGCTTAC 2307
DB 1921 AGTTGTCATGTAGAGCCTTCAACCATTTTCTGTGTTAATCTTGAATAAATGTGCTTAC 1980
QY 2308 CTGTGGAATTAACAAGTTTGTATGATTAATGAG 2340
DB 1981 CTGTGGAATTAACAAGTTTGTATGATTAATGAG 2013

```

RESULT 3


```

US-09-555-640-91
; Sequence 91, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-503-US
; CURRENT APPLICATION NUMBER: US/09/555, 640
; CURRENT FILING DATE: 2000-08-10

Query Match      33.1%; Score 1662; DB 1; Length 1662;
Best Local Similarity 100.0%; Pred. No. 3.4e-22;
Matches 1662; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3017 ATGACTTCAGTTAACTCTGCAAGAGCCAGCACTGTGTGACGCGGGAGGTAGCAACCTT 3076
DB 1 ATGACTTCAGTTAACTCTGCAAGAGCCAGCACTGTGTGACGCGGGAGGTAGCAACCTT 60
QY 3077 ACACAAAGCATGTGAGAGTGAAGGGGCTACATTACTGCTAACTTCTGTAAGTGAATTC 3136
DB 61 ACACAAAGCATGTGAGAGTGAAGGGGCTACATTACTGCTAACTTCTGTAAGTGAATTC 120
QY 3137 TCTAGGCAATTTTAAATTCATATGATCCAGAGCATATATAAGTGTCTCTCCAGCA 3196
DB 121 TCTAGGCAATTTTAAATTCATATGATCCAGAGCATATATAAGTGTCTCTCCAGCA 180
QY 3197 GCTAGTAGTCCACATGCTAGTGGGAAAGAGCAAAAGTGTGCACTATATGCCATT 3256
DB 181 GCTAGTAGTCCACATGCTAGTGGGAAAGAGCAAAAGTGTGCACTATATGCCATT 240
QY 3257 ATGGGGTACTCTACCTCGTGAGATACCTTAGATTTTAACTTTAACTTTTCTCA 3316
DB 241 ATGGGGTACTCTACCTCGTGAGATACCTTAGATTTTAACTTTAACTTTTCTCA 300
QY 3317 CCATTAGAGTTTACAGCACTTAATTGAAATTAATGATGATAGTCCAGATGCTTAACT 3376
DB 301 CCATTAGAGTTTACAGCACTTAATTGAAATTAATGATGATAGTCCAGATGCTTAACT 360
QY 3377 GTAACTATTTTCAAGAAATTCGTGTAAGATGTCAAGACAAAGAGAGGTGTGCA 3436
DB 361 GTAACTATTTTCAAGAAATTCGTGTAAGATGTCAAGACAAAGAGAGGTGTGCA 420
QY 3437 GTTACTGACAGCACCAAGAGCTTTGTATGTTAGTGTGATGATGATGATGATGAT 3496
DB 421 GTTACTGACAGCACCAAGAGCTTTGTATGTTAGTGTGATGATGATGATGATGATGAT 480
QY 3497 TATGCTAGTGTGAGGAGCAAGACACACTAGTCCAGAACTGGCCATTGGGTTTCTT 3556
DB 481 TATGCTAGTGTGAGGAGCAAGACACACTAGTCCAGAACTGGCCATTGGGTTTCTT 540
QY 3557 CCCCCCAGATGCTTACTTAAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 3616
DB 541 CCCCCCAGATGCTTACTTAAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 600
QY 3617 AGCAAAAAATTTGGCTAGTGAAGATACGCTTTTATGTGTTAGGACAGTTCATTGAA 3676
DB 601 AGCAAAAAATTTGGCTAGTGAAGATACGCTTTTATGTGTTAGGACAGTTCATTGAA 660
QY 3677 CTTTGGGATACAGGGGATCTGCAATGTCCTTAAATTTCCAGTGTGCCCCAGAA 3736
DB 661 CTTTGGGATACAGGGGATCTGCAATGTCCTTAAATTTCCAGTGTGCCCCAGAA 720
QY 3737 AACCTGAAGGCTGACGACCAATTTTATGAATGTAACACCTTTGTACGTTCTCGT 3796
DB 721 AACCTGAAGGCTGACGACCAATTTTATGAATGTAACACCTTTGTACGTTCTCGT 780
QY 3797 TTAGGGGTACTGACACATTAGAGAGGGGACCTTAATTTAGATGATTTGACACAGAAAC 3856
DB 781 TTAGGGGTACTGACACATTAGAGAGGGGACCTTAATTTAGATGATTTGACACAGAAAC 840
QY 3857 CAGCAATTAGGCAAAACCTTATGCTGGGGCACTAATAATTACAGTGTACCAAA 3916

```

```

DB 841 CAGCAATTACGACCAAAACCTTATGCTGGGCCACTAATAATTCAAGTGTACCAAA 900
QY 3917 GAAGAGCAATTTCTATACAGTGTGCAAAAGCCCTTACGGGGCTTGTACTGCACT 3976
DB 901 GAAGAGCAATTTCTATACAGTGTGCAAAAGCCCTTACGGGGCTTGTACTGCACT 960
QY 3977 AGCAAAAAACCAAGATTTCCCTAGGCCCCGGGGCAGTATCTCAGCCATACACTGCG 4036
DB 961 AGCAAAAAACCAAGATTTCCCTAGGCCCCGGGGCAGTATCTCAGCCATACACTGCG 1020
QY 4037 GACACTGATTAATTTATGTTACAGAAATTAATGCACTTTCATGACAAACCACTTTGGA 4096
DB 1021 GACACTGATTAATTTATGTTACAGAAATTAATGCACTTTCATGACAAACCACTTTGGA 1080
QY 4097 AATGCTGAGACAAAGATGATGACGAAGGGGTGAGAAATTTCCAAATGAAAAAGAACG 4156
DB 1081 AATGCTGAGACAAAGATGATGACGAAGGGGTGAGAAATTTCCAAATGAAAAAGAACG 1140
QY 4157 CTTAGCACTTCAAGGCTTAAATGACACATCTTCCCTAATAAGAAACCAACAA 4216
DB 1141 CTTAGCACTTCAAGGCTTAAATGACACATCTTCCCTAATAAGAAACCAACAA 1200
QY 4217 TACACAGACCAATTTGAAGCCCTCTTATGTTGGGCTGTTTGAACAGAAAGCTCTT 4276
DB 1201 TACACAGACCAATTTGAAGCCCTCTTATGTTGGGCTGTTTGAACAGAAAGCTCTT 1260
QY 4277 CACTATGAATGACGCTGTGAGTAAATCCCTAATCTTATGATGACAGTTTAAACTCA 4336
DB 1261 CACTATGAATGACGCTGTGAGTAAATCCCTAATCTTATGATGACAGTTTAAACTCA 1320
QY 4337 TTGGCAGCCCTTAGGCGGGGTGGGTTTGATCAACACCCCTTCAATATTTTAAATAA 4396
DB 1321 TTGGCAGCCCTTAGGCGGGGTGGGTTTGATCAACACCCCTTCAATATTTTAAATAA 1380
QY 4397 CTACCAAAAGTGGGCAATTTGAGAGTATTAATCAATGAGGAATTTACTATTAGTTCAA 4456
DB 1381 CTACCAAAAGTGGGCAATTTGAGAGTATTAATCAATGAGGAATTTACTATTAGTTCAA 1440
QY 4457 TATGCTGTGGAAATTAATGACAGTTACATGACCTTTAAATTTGGGACCTGAAAGCTACT 4516
DB 1441 TATGCTGTGGAAATTAATGACAGTTACATGACCTTTAAATTTGGGACCTGAAAGCTACT 1500
QY 4517 GGAAGTGAATTTCCAGGCTGCTTATCTCTTCAAGCAGCTGTGATTAACATAT 4576
DB 1501 GGAAGTGAATTTCCAGGCTGCTTATCTCTTCAAGCAGCTGTGATTAACATAT 1560
QY 4577 GTACTGTATGACCCCAAGCTACAGATGCAAAAGCAACCAAGACAGACGATATGAAAG 4636
DB 1561 GTACTGTATGACCCCAAGCTACAGATGCAAAAGCAACCAAGACAGACGATATGAAAG 1620
QY 4637 CCTGAAGAAATTTGACCTGCCAAAGCGGTGTGACCCATTG 4678
DB 1621 CCTGAAGAAATTTGACCTGCCAAAGCGGTGTGACCCATTG 1662

```

```

RESULT 4
US-09-555-640-74
; Sequence 74, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-503-US
; CURRENT APPLICATION NUMBER: US/09/555, 640
; CURRENT FILING DATE: 2000-08-10

Query Match      14.4%; Score 725; DB 1; Length 725;
Best Local Similarity 100.0%; Pred. No. 6.2e-09;
Matches 725; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```


Db 1 CCCATTGTAAACATTCGCCACCGTGTCTGACGCGAGAAACCTGACCACCGCCACCTG 60
Qy 4732 TGCAGCCCAATTAATATGTCCTCCCTCCATATACCCCTGAGGCAACATTTATTAAGATA 4791
Db 61 TGGCGCCCAATTAATATGTCCTCCCTCCATATACCCCTGAGGCAACATTTATTAAGATA 120
Qy 4792 CAGACGCTGTGAATATTAATTAATTAATAGATATAGAACAACTGTAAATTAAGCTAA 4851
Db 121 CAGACGCTGTGAATATTAATTAATTAATAGATATAGAACAACTGTAAATTAAGCTAA 180
Qy 4852 GATTATGTATATGTACACAGCTTTGAAAAATTAAGCTTAATTAATTAATTAATTAAGT 4911
Db 181 GATTATGTATATGTACACAGCTTTGAAAAATTAAGCTTAATTAATTAATTAATTAAGT 240
Qy 4912 GTATGCTCTTTAAATTT 4931
Db 241 GTATGCTCTTTAAATTT 260

RESULT 10
US-09-555-640-72
; Sequence 72, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 5.1%; Score 255; DB 1; Length 255;
Matches 255; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3043 CAGCACTGCTGACAGCGGGGAGGAGGACCACTTACAAAAGCATGTGAGTGAAGGGGC 3102
Db 1 CAGCACTGCTGACAGCGGGGAGGAGGACCACTTACAAAAGCATGTGAGTGAAGGGGC 60
Qy 3103 TACATTTTACCTTAACTCTGTAACTGTAACTCTCTAGGCAATTTTATTCATATGA 3162
Db 61 TACATTTTACCTTAACTCTGTAACTGTAACTCTCTAGGCAATTTTATTCATATGA 120
Qy 3163 TCCAGACATCATATTAAGTGTCTCTCAGAGGCTAAGTGTGCAACATGCTAAGTGA 3222
Db 121 TCCAGACATCATATTAAGTGTCTCTCAGAGGCTAAGTGTGCAACATGCTAAGTGA 180
Qy 3223 GAAAGAGGCAAAAGTGTGCACTATTAATCCATTAATGAGGTACTTACTCCGTAAGATA 3282
Db 181 GAAAGAGGCAAAAGTGTGCACTATTAATCCATTAATGAGGTACTTACTCCGTAAGATA 240
Qy 3283 CTTAGATTTTAATGC 3297
Db 241 CTTAGATTTTAATGC 255

RESULT 11
US-09-555-640-83
; Sequence 83, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 4.4%; Score 222; DB 1; Length 222;
Matches 222; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1796 ATGCAGATGCCCTCCACCCGATCTCCGAAACCAACCCCATTTGTCCAGACACCAATATCA 1855
Db 1 ATGCAGATGCCCTCCACCCGATCTCCGAAACCAACCCCATTTGTCCAGACACCAATATCA 60
Qy 1856 GCACAGCTGTGTGTGAAGAGCTCTGAAGAACTAGTGAAGAGAGCTTTTCAACCTCATCA 1915
Db 61 GCACAGCTGTGTGTGAAGAGCTCTGAAGAACTAGTGAAGAGAGCTTTTCAACCTCATCA 120
Qy 1916 CTCAGGCGCTGTGAAGAGAGAAACCCCGCTCTGATACGCGCTGCCGAGACAGTT 1975
Db 121 CTCAGGCGCTGTGAAGAGAGAAACCCCGCTCTGATACGCGCTGCCGAGACAGTT 180
Qy 1976 CAGAGAGATCATTTGTGGAAGCCGAGTTTCTCCGAAAGTG 2017
Db 181 CAGAGAGATCATTTGTGGAAGCCGAGTTTCTCCGAAAGTG 222

RESULT 12
US-09-555-640-45
; Sequence 45, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 4.2%; Score 210; DB 1; Length 210;
Matches 210; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 91 CTTTGTGAATTTTGGCGGGCTTTTCCCGCTTATGCAATAAGCGGCAATGTTAATG 150
Db 1 CTTTGTGAATTTTGGCGGGCTTTTCCCGCTTATGCAATAAGCGGCAATGTTAATG 60
Qy 151 TTATTTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 210
Db 61 TTATTTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 120
Qy 211 TATATTAAGCAGCTGCTGCTCCCTGACACTTCTTCTGCTGCTTGTGCTTTGACTGAACTCAC 270
Db 121 TATATTAAGCAGCTGCTGCTCCCTGACACTTCTTCTGCTGCTTGTGCTTTGACTGAACTCAC 180
Qy 271 TTGCTGTTCTTTGCTGCTGCTAAGTAACAGGT 300
Db 181 TTGCTGTTCTTTGCTGCTGCTAAGTAACAGGT 210

RESULT 13
US-09-555-640-49
; Sequence 49, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 3.6%; Score 183; DB 1; Length 183;
Matches 183; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 548 ACAAAATTTGAGAGAGCTATCATATCATATGATATGTTGTTGTCGAGACTAATATGTA 607
Db 1 ACAAAATTTGAGAGAGCTATCATATCATATGATATGTTGTTGTTGTCGAGACTAATATGTA 60

QY 608 GAACTTAACGTGTGCGTAGAAGTTTATTAATGTTCTTATCCATCTTGTAACTG 667
 |||
 DB 61 GAACTTAACGTGTGCGTAGAAGTTTATTAATGTTCTTATCCATCTTGTAACTG 120
 QY 668 AAGGTGTTAACTTAAATTTTCCAGGAGTACACCAAGAAAATATTTAGAGATG 727
 |||
 DB 121 AAGGTGTTAACTTAAATTTTCCAGGAGTACACCAAGAAAATATTTAGAGATG 180
 QY 728 GAG 730
 |||
 DB 181 GAG 183

RESULT 14

US-09-555-640-77
 ; Sequence 77, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 3.6%; Score 180; DB 1; Length 180;
 Best Local Similarity 100.0%; Pred. No. 0.59;
 Matches 180; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4145 GAAAAAGACAGCTTAAGCAGTTACAGTCTTAACATGACACATCTTCCCTAATAAA 4204
 |||
 DB 1 GAAAAAGACAGCTTAAGCAGTTACAGTCTTAACATGACACATCTTCCCTAATAAA 60
 QY 4205 GGAACCAACATACACAGACCAATTTGAAGCCCTCTTATGTGTGGCTCTGTTGGAC 4264
 |||
 DB 61 GGAACCAACATACACAGACCAATTTGAAGCCCTCTTATGTGTGGCTCTGTTGGAC 120
 QY 4265 AGAAGAGCTTTCACTATGAAAGTCAGCTGTGAGTAAATCCCTAATGATGACAGT 4324
 |||
 DB 121 AGAAGAGCTTTCACTATGAAAGTCAGCTGTGAGTAAATCCCTAATGATGACAGT 180

RESULT 15

US-09-555-640-79
 ; Sequence 79, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 3.0%; Score 152; DB 1; Length 152;
 Best Local Similarity 100.0%; Pred. No. 1.6;
 Matches 152; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4420 AGGTATTAATCAATGGAGTAATCTACTTATGTTCAATATGCTGTGGAAATATGACAGT 4479
 |||
 DB 1 AGGTATTAATCAATGGAGTAATCTACTTATGTTCAATATGCTGTGGAAATATGACAGT 60
 QY 4480 TACACATGACCTTTAAATTTGGACCTCGAAGGCTACTGGAAGTGAATCCGACGCTGG 4539
 |||
 DB 61 TACACATGACCTTTAAATTTGGACCTCGAAGGCTACTGGAAGTGAATCCGACGCTGG 120
 QY 4540 CGTTTATCTCTCATGACAGCTGCTCAATTAC 4571
 |||
 DB 121 CGTTTATCTCTCATGACAGCTGCTCAATTAC 152

RESULT 16
 US-09-555-640-59
 ; Sequence 59, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 2.7%; Score 134; DB 1; Length 134;
 Best Local Similarity 100.0%; Pred. No. 3.1;
 Matches 134; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2072 AACTGTTAGAGGGGTGACCTTGTATGGAGATGATGAGGAGTCCCTGTTGCTGTG 2131
 |||
 DB 1 AACTGTTAGAGGGGTGACCTTGTATGGAGATGATGAGGAGTCCCTGTTGCTGTG 60
 QY 2132 TGGACATATTAACAACAGTGGGGGAGGGTTGGGGCTTTGCTCATTTGATTAATGTGG 2191
 |||
 DB 61 TGGACATATTAACAACAGTGGGGGAGGGTTGGGGCTTTGCTCATTTGATTAATGTGG 120
 QY 2192 GAGCTTGATTAAT 2205
 |||
 DB 121 GAGCTTGATTAAT 134

RESULT 17

US-09-555-640-48
 ; Sequence 48, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 2.3%; Score 117; DB 1; Length 117;
 Best Local Similarity 100.0%; Pred. No. 5.9;
 Matches 117; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 431 AACCACTAACCCATTCTAACAGATTAATGCAATATATTTAAGCAGTGTCTTAAAC 490
 |||
 DB 1 AACCACTAACCCATTCTAACAGATTAATGCAATATATTTAAGCAGTGTCTTAAAC 60
 QY 491 TTGATTTTACTGGGGGGCCGCTAGACAGTTGCTTAATCTTTTTCAGGTGAATGTA 547
 |||
 DB 61 TTGATTTTACTGGGGGGCCGCTAGACAGTTGCTTAATCTTTTTCAGGTGAATGTA 117

RESULT 18

US-09-555-640-63
 ; Sequence 63, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 2.3%; Score 114; DB 1; Length 114;
 Best Local Similarity 100.0%; Pred. No. 6.6;
 Matches 114; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Oy 2438 TTAGAGCTTATTCAAATTTTAAAGACCATTAACAATTTCTTATGATATTCCTTAGAA 2497
    |||||
Db 1 TTAGAGCTTATTCAAATTTTAAAGACCATTAACAATTTCTTATGATATTCCTTAGAA 60
Oy 2498 AACCCCTCTTCTTTATTTGACTTACTTGTGCGCATTAAGATCTTAAAAAC 2551
    |||||
Db 61 AACCCCTCTTCTTTATTTGACTTACTTGTGCGCATTAAGATCTTAAAAAC 114

```

RESULT 19

```

US-09-555-640-43
; Sequence 43, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match
Best Local Similarity 2.2%; Score 109; DB 1; Length 109;
Matches 109; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Oy 4920 CTTTAAAAATTTCAAAAAGAGACCAATCAGATCCCGCGGTCGGCCGGTAGGCG 4979
    |||||
Db 1 CTTTAAAAATTTCAAAAAGAGACCAATCAGATCCCGCGGTCGGCCGGTAGGCG 60
Oy 4980 GGACTTCGGTACCAAGATGGCGGACGTTACGTCATTTCTGTGACGTC 5028
    |||||
Db 61 GGACTTCGGTACCAAGATGGCGGACGTTACGTCATTTCTGTGACGTC 109

```

RESULT 20

```

US-09-555-640-43/c
; Sequence 43, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match
Best Local Similarity 2.1%; Score 104; DB 1; Length 109;
Matches 104; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Oy 1 GAGCTCACAGAAATGACGTAAGTCCGCCATCTTGTACCGGAAGTCCCGCTACCGGC 60
    |||||
Db 109 GAGCTCACAGAAATGACGTAAGTCCGCCATCTTGTACCGGAAGTCCCGCTACCGGC 50
Oy 61 GGCGACCGGGCGGATCTGATTTGGTGTCTTTTGAATTTT 104
    |||||
Db 49 GGCGACCGGGCGGATCTGATTTGGTGTCTTTTGAATTTT 6

```

RESULT 21

```

US-09-555-640-44
; Sequence 44, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match
Best Local Similarity 2.0%; Score 103; DB 1; Length 103;
Matches 103; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Oy 1 GAGCTCACAGAAATGACGTAAGTCCGCCATCTTGTACCGGAAGTCCCGCTACCGGC 60
    |||||
Db 1 GAGCTCACAGAAATGACGTAAGTCCGCCATCTTGTACCGGAAGTCCCGCTACCGGC 60
Oy 61 GGCGACCGGGCGGATCTGATTTGGTGTCTTTTGAATTTT 103
    |||||
Db 61 GGCGACCGGGCGGATCTGATTTGGTGTCTTTTGAATTTT 103

```

RESULT 22

```

US-09-555-640-44/c
; Sequence 44, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match
Best Local Similarity 2.0%; Score 103; DB 1; Length 103;
Matches 103; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Oy 4926 AATTTCAAAAAGAGACCAAAATCAGATCCCGCGGTCGGCCGGTAGGCGGACTT 4985
    |||||
Db 103 AATTTCAAAAAGAGACCAAAATCAGATCCCGCGGTCGGCCGGTAGGCGGACTT 44
Oy 4986 CCGGTACCAAGATGGCGGACGTTACGTCATTTCTGTGACGTC 5028
    |||||
Db 43 CCGGTACCAAGATGGCGGACGTTACGTCATTTCTGTGACGTC 1

```

RESULT 23

```

US-09-555-640-62
; Sequence 62, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match
Best Local Similarity 2.0%; Score 102; DB 1; Length 102;
Matches 102; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Oy 2336 ATGAGTAAACCACTAACAAATGCTGGGAAAGAGTACAAATTTGGCCGAGACGTGTAT 2395
    |||||
Db 1 ATGAGTAAACCACTAACAAATGCTGGGAAAGAGTACAAATTTGGCCGAGACGTGTAT 60
Oy 2396 AAGCAGTTTGTGCAATTTTATGAAAAAGCTACTGGAACAGAC 2437
    |||||
Db 61 AAGCAGTTTGTGCAATTTTATGAAAAAGCTACTGGAACAGAC 102

```

RESULT 24

```

US-09-555-640-47
; Sequence 47, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique

```

; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 2.0%; Score 100; DB 1; Length 100;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 100; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 331 GAGCTATTTGGGGGTGCTTGCACATTTCTCTAACATTTGAGCTGTGTAATGATAC 330
DB 1 GAGCTATTTGGGGGTGCTTGCACATTTCTCTAACATTTGAGCTGTGTAATGATAC 60

QY 391 TGGTGGTGGCTTGTAGAGCTTAACTTCTGACGCGG 430
DB 61 TGGTGGTGGCTTGTAGAGCTTAACTTCTGACGCGG 100

RESULT 25
US-09-555-640-60
; Sequence 60, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHERON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 2.0%; Score 100; DB 1; Length 100;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 100; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2206 GAGTGAATTTTGAAGATTACTCCAGACTAGTGGCTGACGTTGTCTAGAGAGCC 2265
DB 1 GAGTGAATTTTGAAGATTACTCCAGACTAGTGGCTGACGTTGTCTAGAGAGCC 60

QY 2266 TCTAACCCATTTTCTGTGTTAACTTGTAAAAATGTGCTT 2305
DB 61 TCTAACCCATTTTCTGTGTTAACTTGTAAAAATGTGCTT 100

RESULT 26
US-09-555-640-58
; Sequence 58, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHERON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 1.9%; Score 98; DB 1; Length 98;
Best Local Similarity 100.0%; Pred. No. 12;
Matches 98; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1974 TTGAGAGAAATCTTTGTGCGAAGCCCAATTTCTCCGAAGTGTAGCCCGCTGCGGGA 2033
DB 1 TTGAGAGAAATCTTTGTGCGAAGCCCAATTTCTCCGAAGTGTAGCCCGCTGCGGGA 60

QY 2034 GGAAGCTTTTACAGCGCGCTGCGGATGAGTTTCG 2071
DB 61 GGAAGCTTTTACAGCGCGCTGCGGATGAGTTTCG 98

RESULT 27
US-09-555-640-53

; Sequence 53, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHERON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 1.7%; Score 84; DB 1; Length 84;
Best Local Similarity 100.0%; Pred. No. 21;
Matches 84; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1483 GCCATTTTGGTGTGTAGCCACACGAGGTAGATCAGAAAAATGCTGCGATGCGCAGTG 1542
DB 1 GCCATTTTGGTGTGTAGCCACACGAGGTAGATCAGAAAAATGCTGCGATGCGCAGTG 60

QY 1543 CCGGTTGCTGTGTGTTAAACC 1566
DB 61 CCGGTTGCTGTGTGTTAAACC 84

RESULT 28
US-09-555-640-55
; Sequence 55, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHERON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 1.5%; Score 76; DB 1; Length 76;
Best Local Similarity 100.0%; Pred. No. 28;
Matches 76; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1627 GCCTTAAGGAACGATGTGAAGCTTAACCTTACATAGATGATGCCCTGACATGGGT 1686
DB 1 GCCTTAAGGAACGATGTGAAGCTTAACCTTACATAGATGATGCCCTGACATGGGT 60

QY 1687 TTACTTACAGAGGCTG 1702
DB 61 TTACTTACAGAGGCTG 76

RESULT 29
US-09-555-640-11
; Sequence 11, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHERON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 1.3%; Score 64; DB 1; Length 64;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 64; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1841 CAGACACGATATCAGACAGATGTGTGAAGACTTAAGAACTCAGTGAAGAGGCT 1900
DB 1 CAGACACGATATCAGACAGATGTGTGAAGACTTAAGAACTCAGTGAAGAGGCT 60

QY 1901 TTTT 1904
||||


```
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      1.0%; Score 51; DB 1; Length 51;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 51; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2881 AAAAAATGAACGAGGTTTCACACACAGCTAAAAGATTACTTACTTT 2931
DB      1 AAAAAATGAACGAGGTTTCACACACAGCTAAAAGATTACTTACTTT 51

RESULT 37
US-09-555-640-22
; Sequence 22, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      1.0%; Score 49; DB 1; Length 49;
Best Local Similarity 100.0%; Pred. No. 85;
Matches 49; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 TACCCGGTACTACTATGTGGGCTGGCAATGAGCTACAAAGCTGGGCC 2757
DB      1 TACCCGGTACTACTATGTGGGCTGGCAATGAGCTACAAAGCTGGGCC 49

RESULT 38
US-09-555-640-75
; Sequence 75, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      1.0%; Score 49; DB 1; Length 49;
Best Local Similarity 100.0%; Pred. No. 85;
Matches 49; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4066 TGCCATTTCACATGACCAACCACTTATGGAATGCTGAGACAAAGAG 4114
DB      1 TGCCATTTCACATGACCAACCACTTATGGAATGCTGAGACAAAGAG 49

RESULT 39
US-09-555-640-21
; Sequence 21, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
```

```
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.9%; Score 47; DB 1; Length 47;
Best Local Similarity 100.0%; Pred. No. 93;
Matches 47; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2655 ATGCAGTATTATCTAGTAGACCTTACACAGCGCTGGCAAGTTAGC 2701
DB      1 ATGCAGTATTATCTAGTAGACCTTACACAGCGCTGGCAAGTTAGC 47

RESULT 40
US-09-555-640-52
; Sequence 52, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.9%; Score 46; DB 1; Length 46;
Best Local Similarity 100.0%; Pred. No. 97;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1437 CTGGAGTAGAGCATTATTAAGTCCACTATGTGTGAGCTGCAGAA 1482
DB      1 CTGGAGTAGAGCATTATTAAGTCCACTATGTGTGAGCTGCAGAA 46

RESULT 41
US-09-555-640-19
; Sequence 19, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.9%; Score 43; DB 1; Length 43;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 43; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2585 CATGACAGTTATCTGACCAACCCCATGCTTATCATCCAGTA 2627
DB      1 CATGACAGTTATCTGACCAACCCCATGCTTATCATCCAGTA 43

RESULT 42
US-09-555-640-71
; Sequence 71, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.8%; Score 42; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

QY      3001 AGAAAAATACCCGACATGACTTCAGTTAACTCTGCAGAAAC 3042
DB      1 AGAAAAATACCCGACATGACTTCAGTTAACTCTGCAGAAAC 42

RESULT 43
US-09-555-640-23
; Sequence 23, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.8%; Score 39; DB 1; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2774 GACAGTGTGCAAGGATTCATGACTTAACTTAACTGCA 2812
DB      1 GACAGTGTGCAAGGATTCATGACTTAACTTAACTGCA 39

RESULT 44
US-09-555-640-67
; Sequence 67, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.8%; Score 39; DB 1; Length 39;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 39; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2747 CAAGCTGGGCTCCGAGATGCTGTGACAGTGTGCA 2785
DB      1 CAAGCTGGGCTCCGAGATGCTGTGACAGTGTGCA 39

RESULT 45
US-09-555-640-70
; Sequence 70, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.7%; Score 37; DB 1; Length 37;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 37; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2964 AAGGAAGTTACCGAAGTCCCGGCTTACAGGCTTC 3000
DB      1 AAGGAAGTTACCGAAGTCCCGGCTTACAGGCTTC 37

RESULT 46
US-09-555-640-51

```

```

; Sequence 51, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.7%; Score 36; DB 1; Length 36;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1401 TCATTATATGATGTCGCGGAAAAGTTGGTGT 1436
DB      1 TCATTATATGATGTCGCGGAAAAGTTGGTGT 36

RESULT 47
US-09-555-640-121
; Sequence 121, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.7%; Score 36; DB 1; Length 36;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1846 ACCAGTATCAGCAGCGTGTGTGAAGCTGTGAA 1881
DB      1 ACCAGTATCAGCAGCGTGTGTGTGAAGCTGTGAA 36

RESULT 48
US-09-555-640-4
; Sequence 4, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.7%; Score 35; DB 1; Length 35;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1384 TGGATATATGAAAACCTTCATTATATGATGTAC 1418
DB      1 TGGATATATGAAAACCTTCATTATATGATGTAC 35

RESULT 49
US-09-555-640-37
; Sequence 37, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications

```

```
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
  0.7%; Score 34; DB 1; Length 34;
  Best Local Similarity 100.0%; Pred. No. 1.7e+02;
  Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4398 TACCACAAAGTGGGCAATTGAGGTATTAATC 4431
Db 1 TACCACAAAGTGGGCAATTGAGGTATTAATC 34

RESULT 50
US-09-555-640-73
; Sequence 73; Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
  0.7%; Score 33; DB 1; Length 33;
  Best Local Similarity 100.0%; Pred. No. 1.8e+02;
  Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3298 TTAAATTTGTTTTCTCACCATTAGAGTTTCA 3330
Db 1 TTAAATTTGTTTTCTCACCATTAGAGTTTCA 33

RESULT 51
US-09-555-640-30
; Sequence 30; Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
  0.6%; Score 32; DB 1; Length 32;
  Best Local Similarity 100.0%; Pred. No. 1.9e+02;
  Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3320 TTAGAGTTTCAGACCTTAATGAAATTAATG 3351
Db 1 TTAGAGTTTCAGACCTTAATGAAATTAATG 32

RESULT 52
US-09-555-640-8
; Sequence 8; Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
  0.6%; Score 31; DB 1; Length 31;
  Best Local Similarity 100.0%; Pred. No. 2e+02;
  Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1746 CCACTATGAAAACCTGGCAATAAATACTACACA 1776
Db 1 CCACTATGAAAACCTGGCAATAAATACTACACA 31

RESULT 53
US-09-555-640-41
; Sequence 41; Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
  0.6%; Score 30; DB 1; Length 30;
  Best Local Similarity 100.0%; Pred. No. 2.1e+02;
  Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4655 GCCAAAAGCCGTGTGCACCCATTGTAAACA 4684
Db 1 GCCAAAAGCCGTGTGCACCCATTGTAAACA 30

RESULT 54
US-09-555-640-46
; Sequence 46; Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
  0.6%; Score 30; DB 1; Length 30;
  Best Local Similarity 100.0%; Pred. No. 2.1e+02;
  Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 301 ATTATACCTACTTTTAATTACTTAACATG 330
Db 1 ATTATACCTACTTTTAATTACTTAACATG 30

RESULT 55
US-09-555-640-56
; Sequence 56; Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
  0.6%; Score 30; DB 1; Length 30;
  Best Local Similarity 100.0%; Pred. No. 2.1e+02;
  Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1703 ATGTACACAAAGCTACTGCTGTATG 1732
Db 1 ATGTACACAAAGCTACTGCTGTATG 30

RESULT 56
```

```
US-09-555-640-61
; Sequence 61, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.6%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2306 ACCTGCTGATTCAGATTTTGTAGATT 2335
Db 1 ACCTGCTGATTCAGATTTTGTAGATT 30

RESULT 57
US-09-555-640-66
; Sequence 66, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.6%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2617 ATCATCCAGTACAGTAGTGACAGAACTAG 2646
Db 1 ATCATCCAGTACAGTAGTGACAGAACTAG 30

RESULT 58
US-09-555-640-76
; Sequence 76, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.6%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4115 TATCAGCAGGGGTAGAGATTTCCAAAT 4144
Db 1 TATCAGCAGGGGTAGAGATTTCCAAAT 30

RESULT 59
US-09-555-640-50/C
; Sequence 50, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
```

```
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.6%; Score 29.6; DB 1; Length 670;
Best Local Similarity 59.5%; Pred. No. 18;
Matches 50; Conservative 0; Mismatches 34; Indels 0; Gaps 0;

Qy 1147 ACATTCCTGTTACATTCAGACTTTGAGCAGGTTACTTGCAATTAAGAAATTAATAGTA 1206
Db 500 ATAGTTTGACACAAATTAATTAATTTACTTATTTCTTTAATGCAAGTAACCTGCTC 441

Qy 1207 AAATTAATTTATGTCACAAACTAT 1230
Db 440 AAAGTCTGATGTAAACAGAAATGT 417

RESULT 60
US-09-555-640-81/C
; Sequence 81, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.6%; Score 29.6; DB 1; Length 2013;
Best Local Similarity 59.5%; Pred. No. 7.2;
Matches 50; Conservative 0; Mismatches 34; Indels 0; Gaps 0;

Qy 1147 ACATTCCTGTTACATTCAGACTTTGAGCAGGTTACTTGCAATTAAGAAATTAATAGTA 1206
Db 903 ATAGTTTGACACAAATTAATTAATTTACTTATTTCTTTAATGCAAGTAACCTGCTC 844

Qy 1207 AAATTAATTTATGTCACAAACTAT 1230
Db 843 AAAGTCTGATGTAAACAGAAATGT 820

RESULT 61
US-09-555-640-3
; Sequence 3, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.6%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 718 TTTAGAGATGAGAGCAGTTTATAGAAA 746
Db 1 TTTAGAGATGAGAGCAGTTTATAGAAA 29

RESULT 62
US-09-555-640-40
; Sequence 40, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
```

APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.6%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4625 GGATATGAAAAGCCTGAAGATTGTGGAC 4653
Db 1 GGATATGAAAAGCCTGAAGATTGTGGAC 29

RESULT 63
US-09-555-640-57
; Sequence 57, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.6%; Score 28; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1733 CACAAAGCTGAGACCACTATGAAACTG 1760
Db 1 CACAAAGCTGAGACCACTATGAAACTG 28

RESULT 64
US-09-555-640-72/c
; Sequence 72, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.5%; Score 26.4; DB 1; Length 255;
Best Local Similarity 55.0%; Pred. No. 43;
Matches 71; Conservative 0; Mismatches 56; Indels 2; Gaps 1;

Qy 4793 AGACGCTGTAGATATTAATTAATTAAGTAATGAACTGTTAGAA--TGCTA 4850
Db 157 AGCTGCTGAGAGAACCTTTATATGATCTCTGATCATATGGAATTAATTCCT 98
Qy 4851 AGATTATGTAATATGTAACACAGTTTGAATAAATGAAGCTTAATTAATTAATTCATAG 4910
Db 97 AGGAATATGTAACAGTTTACAGAAATTAAGAGTAATGTAAGCCCTTCACTCAGATGCTTTT 38
Qy 4911 TGTATGCTT 4919
Db 37 TGTAGGCTT 29

RESULT 65
US-09-555-640-80/c
; Sequence 80, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine

APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.5%; Score 26.4; DB 1; Length 260;
Best Local Similarity 55.0%; Pred. No. 42;
Matches 71; Conservative 0; Mismatches 56; Indels 2; Gaps 1;

Qy 3071 AACCTACAAAAGCATGTGAGTGAAGGCTACATTTACTGTAATTCGTACGTGT 3130
Db 248 AACCATACACTATGATATTAATTAATTAAGCTTTTATTTTCCAACTGTGACATATT 189
Qy 3131 ACATTCCTAGCAATTTTATTCATATGATCCAGACATCATATTAAGTTCCT 3190
Db 188 ACATATCTTACCA--TTCTAATTAATGTTGTTCATATCTGTAATTAATTAATTTCT 131
Qy 3191 CCAGCAGCT 3199
Db 130 ACAGCCTT 122

RESULT 66
US-09-555-640-91/c
; Sequence 91, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.5%; Score 26.4; DB 1; Length 1662;
Best Local Similarity 55.0%; Pred. No. 8.9; Indels 2; Gaps 1;
Matches 71; Conservative 0; Mismatches 56; Indels 2; Gaps 1;

Qy 4793 AGACGCTGTAGATATTAATTAATTAAGTAATGAACTGTTAGAA--TGCTA 4850
Db 183 AGCTGCTGAGAGAACCTTTATATGATCTCTGATCATATGGAATTAATTCCT 124
Qy 4851 AGATTATGTAATATGTAACACAGTTTGAATAAATGAAGCTTAATTAATTAATTCATAG 4910
Db 123 AGGAATGTAACAGTTTACAGAAATTAAGAGTAATGTAAGCCCTTCACTCAGATGCTTTT 64
Qy 4911 TGTATGCTT 4919
Db 63 TGTAGGCTT 55

RESULT 67
US-09-555-640-85/c
; Sequence 85, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.5%; Score 26.4; DB 1; Length 2343;
Best Local Similarity 55.0%; Pred. No. 6.6; Indels 2; Gaps 1;
Matches 71; Conservative 0; Mismatches 56; Indels 2; Gaps 1;
Qy 4793 AGACGCTGTAGATATTAATTAATTAAGTAATGAACTGTTAGAA--TGCTA 4850
Db 157 AGCTGCTGAGAGAACCTTTATATGATCTCTGATCATATGGAATTAATTCCT 98


```
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 100.0%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 418 ACTCTGACTGGAGACCACTAAC 440
DB 1 ACTCTGACTGGAGACCACTAAC 23

RESULT 75
US-09-555-640-10
; Sequence 10, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 100.0%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1795 AATGAGATGCTCCACCCAGA 1817
DB 1 AATGAGATGCTCCACCCAGA 23

RESULT 76
US-09-555-640-25
; Sequence 25, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 100.0%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2870 TTAATAAATATTAATAAATGAAC 2892
DB 1 TTAATAAATATTAATAAATGAAC 23

RESULT 77
US-09-555-640-27
; Sequence 27, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
```

```
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 100.0%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2990 TACAAGCCTCAGAAATAATACC 3012
DB 1 TACAAGCCTCAGAAATAATACC 23

RESULT 78
US-09-555-640-29
; Sequence 29, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 100.0%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3284 TTAGATTTAATGCTTAATTT 3306
DB 1 TTAGATTTAATGCTTAATTT 23

RESULT 79
US-09-555-640-35
; Sequence 35, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 100.0%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4313 TTAGATGACAGTTTAAACTCA 4335
DB 1 TTAGATGACAGTTTAAACTCA 23

RESULT 80
US-09-555-640-38
; Sequence 38, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 100.0%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 4433 ATGGGAATTACTTACTTACTTCA 4455
|||
Db 1 ATGGGAATTACTTACTTACTTCA 23

RESULT 81
US-09-555-640-65
; Sequence 65, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.4%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2574 ATTTGAGACCATGACACTTA 2596
|||
Db 1 ATTTGAGACCATGACACTTA 23

RESULT 82
US-09-555-640-49/c
; Sequence 49, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.4%; Score 22.4; DB 1; Length 183;
Best Local Similarity 66.7%; Pred. No. 60;
Matches 32; Conservative 0; Mismatches 16; Indels 0; Gaps 0;
QY 3857 CACGCAATTCAGCCACAAATTTATGCTGGCCACTATAATATCA 3904
|||
Db 76 CACGCAATTCAGCTTCTAGCATTTAGTCTCGACCACTACTACTCA 29

RESULT 83
US-09-555-640-74/c
; Sequence 74, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.4%; Score 22.4; DB 1; Length 725;
Best Local Similarity 66.7%; Pred. No. 19;
Matches 32; Conservative 0; Mismatches 16; Indels 0; Gaps 0;
QY 576 TGTAGTATTTGGTGTCCAGACTAAATGCTAGAACTTAATCTGTGTG 623
|||
Db 564 TGAATTTATTTAGTGCCAGCCATAAAGTTTGTGTGCTGAATGCTGTG 517

RESULT 84
US-09-555-640-93/c

; Sequence 93, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.4%; Score 22.2; DB 1; Length 396;
Best Local Similarity 48.1%; Pred. No. 32;
Matches 63; Conservative 0; Mismatches 68; Indels 0; Gaps 0;
QY 263 GAACCTACTTCTGCTTTCTTCTGCTGCTAGTACAGGATTTATCTTAATTTA 322
|||
Db 381 GTACATATTTACATTAATCTTACGATTTATCATGTTCTATCTAGTAAATTTT 322
QY 323 CTAACTGAGGCTAATTTGGGGTCTTGCACATTTCTTAACTTCGACGTGCTA 382
|||
Db 321 ATTTCTACAGCGCTGTGATCTTTTATAGATGTTGCTACGGGATTTGGAGGGGAC 262
QY 383 ATGATTAATCTG 393
|||
Db 261 ATATAATCTGG 251

RESULT 85
US-09-555-640-24
; Sequence 24, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.4%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2814 TGGCTAAGTTGGGATTAATCC 2835
|||
Db 1 TGGCTAAGTTGGGATTAATCC 22

RESULT 86
US-09-555-640-64
; Sequence 64, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.4%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2552 TCTCCAGACTATATATGATCATC 2573
|||
Db 1 TCTCCAGACTATATATGATCATC 22

RESULT 87

```
US-09-555-640-87/c
; Sequence 87, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.4%; Score 21; DB 1; Length 681;
Best Local Similarity 58.7%; Pred. No. 21;
Matches 37; Conservative 0; Mismatches 26; Indels 0; Gaps 0;

QY 1047 CCATATCTTATTAAGTAGCAGTCAAGTGGACCTTCAATTCAGTCCCTTAA 1106
DB 643 CCGTAACTCTCTGAAATGGCCACAGGGGCACTGACCTTTAAAGTAAAGTAAT 584

QY 1107 GTT 1109
DB 583 CTT 581

RESULT 88
US-09-555-640-7
; Sequence 7, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 3.4e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1723 TGGTGATGACACAAAGCTGG 1743
DB 1 TGGTGTATGACACAAAGCTGG 21

RESULT 89
US-09-555-640-36
; Sequence 36, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 3.4e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4376 CCTCAATATTTTAAAAATA 4396
DB 1 CCTCAATATTTTAAAAATA 21

RESULT 90
US-09-555-640-42
; Sequence 42, Application US/09555640
; GENERAL INFORMATION:
```

```
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 3.4e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4686 TCCCCACGCGTCTCAGCCA 4706
DB 1 TCCCCACGCGTCTCAGCCA 21

RESULT 91
US-09-555-640-106/c
; Sequence 106, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 3.4e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1879 GAAGAACTCAGTGAAGCAGC 1899
DB 21 GAAGAACTCAGTGAAGCAGC 1

RESULT 92
US-09-555-640-110/c
; Sequence 110, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match
0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 3.4e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2041 TTTTACAGCCGCTTCCGAT 2061
DB 21 TTTTACAGCCGCTTCCGAT 1

RESULT 93
US-09-555-640-115
; Sequence 115, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
```

```
; CURRENT FILING DATE: 2000-08-10
Query Match          0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 3.4e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1755 AACTGGGCAATAAATACAC 1775
DB      1 AACTGGGCAATAAATACAC 21

RESULT 94
US-09-555-640-119
; Sequence 119, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match          0.4%; Score 21; DB 1; Length 29;
Best Local Similarity 82.8%; Pred. No. 2.6e+02;
Matches 24; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY      2998 CTCAGAAAATAACCCGACATGACTTCAG 3026
DB      1 CACGATCCATACCCGACATGACTTCAG 29

RESULT 95
US-09-555-640-117
; Sequence 117, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match          0.4%; Score 20.6; DB 1; Length 33;
Best Local Similarity 85.2%; Pred. No. 2.4e+02;
Matches 23; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      2320 CAAAGTTTGTAGATTATGATGAAC 2346
DB      7 CTAGATCTGTAGATTATGATGAAC 33

RESULT 96
US-09-555-640-5
; Sequence 5, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match          0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1429 TTGTTGTCTGGGATGAAG 1448
```

```
DB      1 TTGTTGTCTGGGATGAAG 20

RESULT 97
US-09-555-640-6
; Sequence 6, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match          0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1693 ACAGAGGCTGATGTACACA 1712
DB      1 ACAGAGGCTGATGTACACA 20

RESULT 98
US-09-555-640-14
; Sequence 14, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match          0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2062 CAGTTTCGTAAGTGTAGT 2081
DB      1 CAGTTTCGTAAGTGTAGT 20

RESULT 99
US-09-555-640-31
; Sequence 31, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match          0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4055 ACAGAAATTAATGCCATTTC 4074
DB      1 ACAGAAATTAATGCCATTTC 20

RESULT 100
US-09-555-640-107
; Sequence 107, Application US/09555640
```

```
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1968 GACCACTTCAGGAGATCAT 1987
DB      1 GACCACTTCAGGAGATCAT 20
|||||

RESULT 101
US-09-555-640-109/c
; Sequence 109, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2298 ATGTGCTTACTGCTGTGGAT 2317
DB      20 ATGTGCTTACTGCTGTGGAT 1
|||||

RESULT 102
US-09-555-640-112/c
; Sequence 112, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2793 ATGACTTAGGTATAGCCAA 2812
DB      20 ATGACTTAGGTATAGCCAA 1
|||||

RESULT 103
US-09-555-640-116/c
; Sequence 116, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
```

```
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2845 TTGGACGGTGAAGATGAAG 2864
DB      20 TTGGACGGTGAAGATGAAG 1
|||||

RESULT 104
US-09-555-640-55/c
; Sequence 55, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 19.8; DB 1; Length 76;
Best Local Similarity 57.1%; Pred. No. 1.3e+02;
Matches 36; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

QY      1631 TAAAGAACGATGTGAAGCTTAACCTTACATTAAGATGATGACCTGATGAGTTTAC 1690
DB      67 TAAAGTAACCACTGTCAGGCTTACATCTTATGTAAGTTAGCTTACATCCGTTCC 8
|||||

QY      1691 TTA 1693
DB      7 TTA 5
|||||

RESULT 105
US-09-555-640-79/c
; Sequence 79, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 19.6; DB 1; Length 152;
Best Local Similarity 54.1%; Pred. No. 74;
Matches 40; Conservative 0; Mismatches 34; Indels 0; Gaps 0;

QY      1726 TGTATGCACAAAGCTGAGCCACTATGAAATGCGCATTAATGATGATTTG 1785
DB      76 TTTAAAGTCATGATGATCTGATATATCCACAGCATTTGAATGAAGTAAATTC 17
|||||

QY      1786 CCTGAAATAATGC 1799
DB      16 CATGATTTAATAC 3
|||||

RESULT 106
US-09-555-640-63/c
; Sequence 63, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
```

```
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 0.4%; Score 19.4; DB 1; Length 114;
Matches 26; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

QY 4902 AATCATAGTGTATGTTTAAATTTCAAAAG 4938
DB 43 AAGAAATGTTGTAATGCTTTTAAATTTCAATAG 7

RESULT 107
US-09-555-640-18
Sequence 18, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 0.4%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2562 TATATAGTCATCATTTCA 2580
DB 1 TATATAGTCATCATTTCA 19

RESULT 108
US-09-555-640-20
Sequence 20, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 0.4%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2635 TGCAGAACTAGAGAGAA 2653
DB 1 TGCAGAACTAGAGAGAA 19

RESULT 109
US-09-555-640-105
Sequence 105, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 0.4%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1797 TGCAGATGCCCTCCACCCA 1815
DB 1 TGCAGATGCCCTCCACCCA 19

RESULT 110
US-09-555-640-108/C
Sequence 108, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 0.4%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2043 TTACAGCGCGCTTGCCGAT 2061
DB 19 TTACAGCGCGCTTGCCGAT 1

RESULT 111
US-09-555-640-111
Sequence 111, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 0.4%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2609 CATGCTTATCATCCAGTA 2627
DB 1 CATGCTTATCATCCAGTA 19

RESULT 112
US-09-555-640-113
Sequence 113, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match
Best Local Similarity 0.4%; Score 19; DB 1; Length 19;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1747 CACTATGAAAACCTGGGCAA 1765
DB 1 CACTATGAAAACCTGGGCAA 19

RESULT 113
```

```
US-09-555-640-114/c
; Sequence 114, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2852 GTAGCAGATGAGAAATTTGT 2870
DB      19 GTAGCAGATGAGAAATTTGT 1

RESULT 114
US-09-555-640-118/c
; Sequence 118, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 19; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4705 CAGGAACCGTCACCCACCG 4723
DB      26 CAGGAACCGTCACCCACCG 8

RESULT 115
US-09-555-640-120/c
; Sequence 120, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 19; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4705 CAGGAACCGTCACCCACCG 4723
DB      27 CAGGAACCGTCACCCACCG 9

RESULT 116
US-09-555-640-83/c
; Sequence 83, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
```

```
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 18.4; DB 1; Length 222;
Best Local Similarity 63.6%; Pred. No. 56;
Matches 28; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

QY      1827 CACCCCATTTGCCAGACAGATACGACGACGATGCTG 1870
DB      75 CACCACTGCTGCTGATATGCTGCTGAGACATGGGGTG 32

RESULT 117
US-09-555-640-89/c
; Sequence 89, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 18.4; DB 1; Length 306;
Best Local Similarity 48.1%; Pred. No. 43;
Matches 52; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY      2633 AGTGCAGAACCTTAGAGAGAAATGAGATATATCTAGTGAACCTTACAGACCTGGG 2692
DB      218 ATGCCAGGCCCAACATGATGATACGGGTATGATGCTAATCTGCCCAGGCTTGG 159

QY      2693 CAGTTAGCATCAATTACCGGTACTACTATGTTGGCCTGGCAAT 2740
DB      158 TAACTTCACTAGATATATCTGCAATTTCTCTCCTAGGTTGCACT 111

RESULT 118
US-09-555-640-26/c
; Sequence 26, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.4%; Score 18.2; DB 1; Length 53;
Best Local Similarity 61.7%; Pred. No. 1.8e+02;
Matches 29; Conservative 0; Mismatches 18; Indels 0; Gaps 0;

QY      1052 ATAATTATTAATAGACAGTCAAGTGCAGCTTTCAAAATCAAGT 1098
DB      53 AAATTCCTTTGAATAATGGGCAAGGCGAGCTGCACCTTTTAAAGT 7

RESULT 119
US-09-555-640-17
; Sequence 17, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
```


; CURRENT FILING DATE: 2000-08-10

Query Match 0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2543 CTTAAAACTCTCCAGAC 2560
Db 1 CTTAAAACTCTCCAGAC 18

RESULT 120

US-09-555-640-34
; Sequence 34, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4288 TCAGCTGTGAGTAAAT 4305
Db 1 TCAGCTGTGAGTAAAT 18

RESULT 121

US-09-555-640-58/c
; Sequence 58, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.4%; Score 17.6; DB 1; Length 98;
Best Local Similarity 65.0%; Pred. No. 1.1e+02;
Matches 26; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

Qy 2001 AGTTTCTCGAGTGTAGCCGCTGCGGAGAGT 2040
Db 67 AGCTTCTCCAGACGCGGTACCTTCGAGGAACT 28

RESULT 122

US-09-555-640-77/c
; Sequence 77, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 17.4; DB 1; Length 180;
Best Local Similarity 45.8%; Pred. No. 67;
Matches 60; Conservative 0; Mismatches 71; Indels 0; Gaps 0;

Qy 4157 CTTAAGCACTTCAAGGCTTAACTGACACACTACTTCCCTAATTAAGAACCAACACA 4216

Db 143 CTTTCATAGGAGAGCTCTTCTGTTCCAAAGAGCCCACTAAGAGGCGTTCATT 84

Qy 4217 TACAGACCAAAATTGAAGCCCTTTATGTGGCTGTTGGAAGAGAGCTCT 4276
Db 83 TGGTCTGTATGTGTGGGCTTCTTTATTAAGGAAGTATGTGCTTATTAAGAGCTGT 24

Qy 4277 CACTATGAAG 4287
Db 23 AACTGCTTAAG 13

RESULT 123

US-09-555-640-37/c
; Sequence 37, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 17.2; DB 1; Length 34;
Best Local Similarity 73.3%; Pred. No. 2.6e+02;
Matches 22; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 4395 TACTACCAAAATGGGCCAATTGGAGTA 4424
Db 30 TATACCTTCAATTTGGCCCACTTTGTGTA 1

RESULT 124

US-09-555-640-9
; Sequence 9, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.4e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1777 TTTGATTTCCCTGGAAT 1793
Db 1 TTTGATTTCCCTGGAAT 17

RESULT 125

US-09-555-640-59/c
; Sequence 59, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 16.2; DB 1; Length 134;
Best Local Similarity 60.0%; Pred. No. 89;
Matches 27; Conservative 0; Mismatches 18; Indels 0; Gaps 0;

QY 4917 GTCTTTAAATTTCAAAAGACACCAATTCAGATCCGCC 4961
DB 77 GTTGTATATATTCTTCCACACGCAACGCAATCCCTCAGACC 33

RESULT 126

US-09-555-640-62/c
; Sequence 62, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoinette
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 16; DB 1; Length 102;

Best Local Similarity 58.3%; Pred. No. 1.1e+02;
Matches 28; Conservative 0; Mismatches 20; Indels 0; Gaps 0;

QY 2371 TGACAAATTTGCCAGACGCTGTATAGACGTTTGCATTTTATGA 2418
DB 83 TCATTAATTTGCACAACTGCTATACGCTCTGGGCAATTTGTCA 36

RESULT 127

US-09-555-640-45/c
; Sequence 45, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoinette
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 16; DB 1; Length 210;

Best Local Similarity 53.1%; Pred. No. 61;
Matches 34; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

QY 4134 GATTTCCAATGAAAAGACAGCTTAGACGTTTACATGCACTACT 4193
DB 178 GAGTTCAGTCAAAAGCAACGAAAAGAGTGTGAGGAGCGAGCTTATATACC 119

QY 4194 TCCC 4197
DB 118 GCCC 115

RESULT 128

US-09-555-640-39/c
; Sequence 39, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoinette
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 15.6; DB 1; Length 62;

Best Local Similarity 55.6%; Pred. No. 1.7e+02;
Matches 30; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

QY 909 GTCTAGCTGTGAGGGAGATGTTGTCATTCGTGAAAGGAAACAAAGC 962
DB 54 GTCTTGCTTTGACATCTGTAGCTGTGGGTATACAGTACATATGTAAATGACC 1

RESULT 129

US-09-555-640-47/c
; Sequence 47, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoinette
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 15.6; DB 1; Length 100;

Best Local Similarity 53.2%; Pred. No. 1.1e+02;
Matches 33; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

QY 673 GTTAACCTTAATTTTGCAGAGAGTACCAAGAAAATTTTATAGATGAGAG 732
DB 81 GTTAGCATAGACACCAAGTTATCATTTAGCAGTCCAGAAATTTAGAGAAATGTG 22

QY 733 CA 734
DB 21 CA 20

RESULT 130

US-09-555-640-60/c
; Sequence 60, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoinette
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 15.6; DB 1; Length 100;

Best Local Similarity 81.8%; Pred. No. 1.1e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4293 TGTGAGTAAATTCCTTAATT 4314
DB 29 TCTGAGTAACTCTTAATT 8

RESULT 131

US-09-555-640-48/c
; Sequence 48, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoinette
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 15.6; DB 1; Length 117;

Best Local Similarity 47.9%; Pred. No. 99;
Matches 45; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

QY 1121 AAGCTACTTACTAGTACCACTAGTACTTCTGTTTACATTCAGACTTGAGCAGTTA 1180
DB 94 AAGCAACTGCTAGCGGCCCCAGTAAATCAAGTTTGAAGCAACACTGCTTAATAT 35

QY 1181 CTTCATTAAGAAATTAATAGTAAATTAAT 1214

Db 34 ATTGCATTAACTGTAGAAAGGTTAGTGT 1

RESULT 132
US-09-555-640-51/c
; Sequence 51, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 15.2; DB 1; Length 36;
Best Local Similarity 63.9%; Pred. No. 2.6e+02;
Matches 23; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

QY 1603 ACCACTCACTGTGCATGCTAAAGCTTAAGGA 1638
Db 36 ACCACCAAACTTTCCCGCTACATCATTAATGA 1

RESULT 133
US-09-555-640-53/c
; Sequence 53, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 14.8; DB 1; Length 84;
Best Local Similarity 59.5%; Pred. No. 1.3e+02;
Matches 25; Conservative 0; Mismatches 17; Indels 0; Gaps 0;

QY 3683 GGACAGGGGGAGTCTGCTATGTCTTCAATTTCCAGCT 3724
Db 71 GGACACCGGCGACTGCACATGCCAGCATTTTCTGACT 30

RESULT 134
US-09-555-640-36/c
; Sequence 36, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4383 TATTTTAAATACT 4398
Db 21 TATTTTAAATAATTT 6

RESULT 135
US-09-555-640-52/c
; Sequence 52, Application US/09555640
; GENERAL INFORMATION:

; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 14.4; DB 1; Length 46;
Best Local Similarity 65.6%; Pred. No. 2.2e+02;
Matches 21; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

QY 4635 AGCCTAAGATTTGTGACTGCCAAAGCCGT 4666
Db 40 AGCTTCACAAATGAGTGAATTAATATGCTT 9

RESULT 136
US-09-555-640-75/c
; Sequence 75, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 14.4; DB 1; Length 49;
Best Local Similarity 65.6%; Pred. No. 2e+02;
Matches 21; Conservative 0; Mismatches 11; Indels 0; Gaps 0;

QY 2378 TTTGCCAGAGCTGTATTAAGCATTTGTGCA 2409
Db 44 TGTCTCAGCATTTCCATTAAGTGTTGTCCA 13

RESULT 137
US-09-555-640-78/c
; Sequence 78, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 14; DB 1; Length 64;
Best Local Similarity 66.7%; Pred. No. 1.7e+02;
Matches 20; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

QY 1796 ATGCAGATGCCCTCACCCAGATCTCCAA 1825
Db 42 ATGCMAACCCACCCGCTAAGGCTGCATA 13

RESULT 138
US-09-555-640-69/c
; Sequence 69, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640

```

; CURRENT FILING DATE: 2000-08-10
Query Match 0.3%; Score 13.6; DB 1; Length 51;
Best Local Similarity 56.8%; Pred. No. 2e+02;
Matches 25; Conservative 0; Mismatches 19; Indels 0; Gaps 0;

OY 3914 AAAGAGAGACATTCATATACAGGCTGCGAAGGCCCTTAC 3957
Db 51 AAAGTAAAGTATCTTTTACTGCTTGCTTGAAACCTGTTC 8

RESULT 139
US-09-555-640-54/C
; Sequence 54, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 13.6; DB 1; Length 60;
Best Local Similarity 61.1%; Pred. No. 1.8e+02;
Matches 22; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

OY 2856 CAGATGAAGATGTTAAATAATATTAATAATGAAA 2891
Db 49 CAGTTGATGCTATTTACCACTCACACAAATGTA 14

RESULT 140
US-09-555-640-67/C
; Sequence 67, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 13.4; DB 1; Length 39;
Best Local Similarity 73.9%; Pred. No. 2.5e+02;
Matches 17; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

OY 1983 ATCATTTGTCCGAAGCCCACTTT 2005
Db 24 AGCATTCGCGAGGCCCACTT 2

RESULT 141
US-09-555-640-13/C
; Sequence 13, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match 0.3%; Score 13.4; DB 1; Length 55;
Best Local Similarity 73.9%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

OY 2748 AAGCTGGGCTCCGACAGATGCT 2770

```

```

Db      45 AACTGGGCTTCGCACAAATCAT   ||||||| |||| |
RESULT 142
US-09-555-640-61/c
; Sequence 61, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT FILING DATE: 2000-08-10

Query Match          0.3%; Score 13.2; DB 1; Length 30;
Best Local Similarity 83.3%; Pred. No. 3.1e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy      3769 AATGTACAACCCTTGTGA 3786    ||||||| |||||
Db      30 AATTCAAAAATTGTA 13           ||||||| |||||

RESULT 143
US-09-555-640-21/c
; Sequence 21, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match          0.3%; Score 13.2; DB 1; Length 47;
Best Local Similarity 57.1%; Pred. No. 2.2e+02;
Matches 24; Conservative 0; Mismatches 18; Indels 0; Gaps 0;

Oy      2450 CAAATTTAAAAAGCATTACAACATTTCTTAGATAATCCT 2491    ||||||| ||||| |||||
Db      46 CTAACTTGCCCGAGCTGTGTAAAGTCTTCACTAGATAAATACT 5     ||||||| ||||| |||||

RESULT 144
US-09-555-640-11/c
; Sequence 11, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match          0.3%; Score 13.2; DB 1; Length 64;
Best Local Similarity 69.2%; Pred. No. 1.7e+02;
Matches 18; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Oy      216 AACGAGCTGCCGTTCCCTGCACACTTTC 241                ||||||| |||||
Db      64 AAAAAGCTGCTTTCACATGAGTTCTTC 39                   ||||||| |||||

RESULT 145
US-09-555-640-8/c
; Sequence 8, Application US/09555640
```

```

; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match      0.3%; Score 13; DB 1; Length 31;
Best Local Similarity 65.5%; Pred. No. 3e+02;
Matches 19; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

```

```

QY      1051 TATACCTTATTAAGTACGACGACGTGG 1079
DB      29 TGTAGTTTATTGCCACGTTTCATAGTGG 1

```

```

RESULT 146
US-09-555-640-73/c
; Sequence 73, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match      0.3%; Score 13; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1325 GAAAAACAATTT 1337
DB      16 GAAAAACAATTT 4

```

```

RESULT 147
US-09-555-640-30/c
; Sequence 30, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match      0.3%; Score 12.8; DB 1; Length 32;
Best Local Similarity 70.8%; Pred. No. 3e+02; 7; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

```

```

QY      155 ATTTAATTTAATGACAAACGC 178
DB      27 ATTTCATTAATGAGTCTGAACATC 4

```

```

RESULT 148
US-09-555-640-29/c
; Sequence 29, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US

```

```

; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match      0.2%; Score 12.2; DB 1; Length 23;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

QY      4880 AAAATTAAGCCTTAA 4896
DB      23 AAATTTAAGCATTA 7

```

```

RESULT 149
US-09-555-640-4/c
; Sequence 4, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match      0.2%; Score 12.2; DB 1; Length 35;
Best Local Similarity 82.4%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

QY      1390 AATGAAACTTTCATT 1406
DB      23 AATGAAAGTTTCATT 7

```

```

RESULT 150
US-09-555-640-22/c
; Sequence 22, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match      0.2%; Score 12.2; DB 1; Length 49;
Best Local Similarity 53.1%; Pred. No. 2.1e+02;
Matches 26; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

```

```

QY      2690 GGGCAAGTTACATACATCCGGTACTATGTTGGCCTGGCA 2738
DB      49 GACCAGCTTGTAGCTCATTCGAGCCCAACATAGTAGACGGGTA 1

```

```

RESULT 151
US-09-555-640-5/c
; Sequence 5, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match      0.2%; Score 12; DB 1; Length 20;
Best Local Similarity 75.0%; Pred. No. 4.4e+02;
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

```

```

Qy      1805 CCCTCCACCAGATCTCCAA 1824
          ||| ||||| | |||
Db      20 CCTTCATCCAGACCACCAA 1

```

RESULT 152
 US-09-555-640-25/c
 Sequence 25. Application US/09555640
 GENERAL INFORMATION:
 APPLICANT: NGUYEN, Quang Tri
 APPLICANT: GARBARG-CHENON, Antoine
 APPLICANT: AUGUSTE, Veronique
 APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 TITLE OF INVENTION: Erythrovirus and its applications
 FILE REFERENCE: 4563-6-5033-US
 CURRENT APPLICATION NUMBER: US/09/555,640
 CURRENT FILING DATE: 2000-08-10

Query Match	0.2%	Score 12	DB 1	Length 23
Best Local Similarity	75.0%	Pred. No.	3.9e+02	
Matches 15	Conservative	0	Mismatches 5	Indels 0
			Gaps	0

Qy	3290	TTTATGCTTTAAATTGTT	3309
Db	22	TTTCATTTTATATTTTTT	3

RESULT 153
US-09-555-640-35/c
Sequence 35 Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARD-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5-033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match	0.2%	Score 12	DB 1	Length 23
Best Local Similarity	100.0%	Pred. No.	3.9e+02	
Matches 12	Conservative 0	Mismatches 0	Indels 0	Gaps 0

QY	4322	AGTTTAAACT	4333
Db	21	AGTTTAAACT	10

RESULT 154
US-09-555-640-13/c
: Sequence 33, Application US/09555640
: GENERAL INFORMATION:
: APPLICANT: NGUYEN, Quang Tri
: APPLICANT: GARBARG-CHENON, Antoine
: APPLICANT: AUGUSTE, Veronique
: APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
: TITLE OF INVENTION: Erythrovirus and its applications
: FILE REFERENCE: 45636-5033-US
: CURRENT APPLICATION NUMBER: US/09/555,640
: CURRENT FILING DATE: 2000-08-10

Query Match	0.2%	Score 12	DB 1	Length 26
Best Local Similarity	75.0%	Pred. No.	3.6e+02	
Matches 15	Conservative	0	Mismatches 5	Indels 0
			Gaps	0

QY	645	TGTTCTTACCATCTTGTA	664
Db	23	TGTTCTTTTCATTGAAA	4

RESULT 155
US-09-555-640-46/c

```

: Sequence 46, Application US/09555640
: GENERAL INFORMATION:
:
: APPLICANT: NGUYEN, Quang Tri
: APPLICANT: GARBARD-CHENON, Antoine
: APPLICANT: AUCUSTE, Veronique
: APPLICANT: ASSISTANCE PUBLIQUE-HOPIRUX DE PARIS
: TITLE OF INVENTION: Erythrovane and its applications
: FILE REFERENCE: 45636-5033-US
: CURRENT APPLICATION NUMBER: US/09/555,640
: CURRENT FILING DATE: 2000-08-10

```

Query Match	0.2%	Score 12	DB 1	Length 30
Best Local Similarity	64.3%	Pred. No.	3 2e+02	
Matches 18	Conservative 0	Mismatches 10	Indels 0	Gaps 0

Oy	3464	TGTA	TGTAGT	TAGTGATCAT	GACGATAAAT	3491
Db	28	TGTTAGTAAATTAAAGT	TAGTATAAAT	1		

RESULT 156
US-09-555-640-70/c
Sequence 70, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAL DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match	0.2%	Score 12	DB 1	length 37
Best Local Similarity	64.3%	Pred. NC	2.7e+02	
Matches 18	Conservative	0	Mismatches 10	Indels 0
				Gaps 0

```

QY      4966  GCCGCCGCTAGCGCGGACTTCCGGTACA  4993
          |||      |||
DB      35    GGCCTTGTACGCGGCACTTCCGGTAA  8

```

RESULT 157
US-09-555-640-68/c
; Sequence 68, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoinette
; APPLICANT: AUGUST, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555, 640
; CURRENT FILING DATE: 2000-08-10

Query Match	0.2%	Score 12:	DB 1:	length 56:
Best Local Similarity	64.3%	Pred. No.	1.9e+02:	
Matches 18, Conservative	0:	Mismatches	10:	Indels 0: Gaps 0

QY 302 TTTATACCTTTTAACTTACTACAT 329
||| ||| ||| ||| ||| ||| |||
Db 52 TTTTAACTATCTTCATCTGCTACCGT 25

RESULT 158
US-09-555-640-32/c
; Sequence 32, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN Quang Tri
; APPLICANT: GARBARD-CHENON, Antoinette
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications

FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 11.8; DB 1; Length 24;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 519 TTGCTTACTTTT 533
DB 18 TTGCTGATCTTT 4

RESULT 159
US-09-555-640-121/c
Sequence 121, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 11.8; DB 1; Length 36;
Best Local Similarity 69.6%; Pred. No. 2.8e+02;
Matches 16; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 1851 TATCAGACGAGCGTGTGATA 1873
DB 28 TTTCACCACTGCTGCTGATA 6

RESULT 160
US-09-555-640-71/c
Sequence 71, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 11.8; DB 1; Length 42;
Best Local Similarity 61.3%; Pred. No. 2.4e+02;
Matches 19; Conservative 0; Mismatches 12; Indels 0; Gaps 0;

QY 2215 TTTAGAGTTTACTCCAGACTTGTGCGCT 2245
DB 39 TCTGACAGTTACTGATGATCATGTGGGGT 9

RESULT 161
US-09-555-640-19/c
Sequence 19, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 11.6; DB 1; Length 43;
Best Local Similarity 77.8%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2587 TGGACGATATCTGACCA 2604
DB 20 TGGTCAGATTAATCTGTCA 3

RESULT 162
US-09-555-640-106
Sequence 106, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 11.4; DB 1; Length 21;
Best Local Similarity 71.4%; Pred. No. 4.3e+02;
Matches 15; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 221 GCTGCTTCTCTGACACTTTC 241
DB 1 GCTGCTTCTCTGAGTTCTTC 21

RESULT 163
US-09-555-640-117/c
Sequence 117, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 11.4; DB 1; Length 33;
Best Local Similarity 71.4%; Pred. No. 3e+02;
Matches 15; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 2445 TTATCAATTTTAAAGACC 2465
DB 30 TTACTCATATCTACAGATC 10

RESULT 164
US-09-555-640-24/c
Sequence 24, Application US/09555640
GENERAL INFORMATION:
APPLICANT: NGUYEN, Quang Tri
APPLICANT: GARBARG-CHENON, Antoine
APPLICANT: AUGUSTE, Veronique
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
TITLE OF INVENTION: Erythrovirus and its applications
FILE REFERENCE: 45636-5033-US
CURRENT APPLICATION NUMBER: US/09/555,640
CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 11.2; DB 1; Length 22;
Best Local Similarity 81.2%; Pred. No. 4.1e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2224 TTATCTCCAGACTTAG 2239
DB 19 TTATCTCCAACTTAG 4

RESULT 165


```

US-09-555-640-10/c
; Sequence 10, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; TITLE OF INVENTION: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.2%; Score 11.2; DB 1; Length 23;
Best Local Similarity 81.2%; Pred. No. 4e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1436 TCTGGATGAGGCACT 1451
DB      23 TCTGGGTGAGGCGCAT 8

RESULT 166
US-09-555-640-18/c
; Sequence 18, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; TITLE OF INVENTION: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.2%; Score 11; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY      3340 TGAATTTATGCTAGTATA 3358
DB      19 TGAATGATGACTATATA 1

RESULT 167
US-09-555-640-107/c
; Sequence 107, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; TITLE OF INVENTION: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.2%; Score 11; DB 1; Length 20;
Best Local Similarity 73.7%; Pred. No. 4.5e+02;
Matches 14; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY      2060 ATCAGTTCTGTAAGTGT 2078
DB      20 ATGATTTCTGTAAGTGT 2

RESULT 168
US-09-555-640-40/c
; Sequence 40, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS

```

```

; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.2%; Score 11; DB 1; Length 29;
Best Local Similarity 73.7%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY      1458 GTCCACTATTGCGAGCT 1476
DB      29 GTCCACATTTCTGAGCT 11

RESULT 169
US-09-555-640-112
; Sequence 112, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; TITLE OF INVENTION: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.2%; Score 10.8; DB 1; Length 20;
Best Local Similarity 85.7%; Pred. No. 4.5e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1343 TGGCTATTGCTTAA 1356
DB      2 TGGCTATTAAGTAA 15

RESULT 170
US-09-555-640-38/c
; Sequence 38, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; TITLE OF INVENTION: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.2%; Score 10.8; DB 1; Length 23;
Best Local Similarity 85.7%; Pred. No. 4e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1194 AATAAATAGTAA 1207
DB      21 AACTAAAGTAGTAA 8

RESULT 171
US-09-555-640-3/c
; Sequence 3, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; TITLE OF INVENTION: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

Query Match      0.2%; Score 10.8; DB 1; Length 29;
Best Local Similarity 85.7%; Pred. No. 3.4e+02;

```

Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3176 TATAAGTGTCTC 3189
 |||||
 Db 24 TATAACTGCTCTC 11

RESULT 172
 US-09-555-640-66/c
 ; Sequence 66, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.8; DB 1; Length 30;
 Best Local Similarity 85.7%; Pred. No. 3.3e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3468 TGTATGCGATCAT 3481
 |||||
 Db 14 TGTACTGCGATGAT 1

RESULT 173
 US-09-555-640-23/c
 ; Sequence 23, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.8; DB 1; Length 39;
 Best Local Similarity 85.7%; Pred. No. 2.7e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1343 TGGCTATGCTTAA 1356
 |||||
 Db 38 TGGCTATGCTTAA 25

RESULT 174
 US-09-555-640-6/c
 ; Sequence 6, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.6; DB 1; Length 20;
 Best Local Similarity 76.5%; Pred. No. 4.5e+02;
 Matches 13; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 817 TGTATTGCGCCTCTT 833
 |||||
 Db 17 TGTACTGCGCCTCTT 1

RESULT 175
 US-09-555-640-28/c
 ; Sequence 28, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.6; DB 1; Length 26;
 Best Local Similarity 76.5%; Pred. No. 3.3e+02;
 Matches 13; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 3042 CCAGCACTGTCAGGC 3058
 |||||
 Db 26 CCGCAGCAGTCTGCGC 10

RESULT 176
 US-09-555-640-57/c
 ; Sequence 57, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.4; DB 1; Length 28;
 Best Local Similarity 70.0%; Pred. No. 3.5e+02;
 Matches 14; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 4904 TTCATAGTGATGCTCTT 4923
 |||||
 Db 23 TTCATAGTGCTCCAGCTTT 4

RESULT 177
 US-09-555-640-56/c
 ; Sequence 56, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.4; DB 1; Length 30;
 Best Local Similarity 91.7%; Pred. No. 3.3e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1105 AAGTTAGCTATT 1116
 |||||
 Db 21 AAGTTAGCTATT 10

RESULT 178
 US-09-555-640-34/c
 ; Sequence 34, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique

APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 TITLE OF INVENTION: Erythrovirus and its applications
 FILE REFERENCE: 45636-5033-US
 CURRENT APPLICATION NUMBER: US/09/555,640
 CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.2; DB 1; Length 18;
 Best Local Similarity 80.0%; Pred. No. 4.9e+02;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4583 TATGACCCACAGCT 4597
 DB 17 TTTTACTCCACAGCT 3

RESULT 179
 US-09-555-640-42/c
 ; Sequence 42, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.2; DB 1; Length 21;
 Best Local Similarity 80.0%; Pred. No. 4.4e+02;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4100 GCTGAGGACAAAGG 4114
 DB 19 GCTGAGGACACGGTG 5

RESULT 180
 US-09-555-640-2/c
 ; Sequence 2, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.2; DB 1; Length 23;
 Best Local Similarity 65.2%; Pred. No. 4.1e+02;
 Matches 15; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 3215 GCTAGTGGGAAAGCGCAAGT 3237
 DB 23 GTTAGTGTTCCAGTCAGAGT 1

RESULT 181
 US-09-555-640-65/c
 ; Sequence 65, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.2; DB 1; Length 23;

Best Local Similarity 65.2%; Pred. No. 4.1e+02;
 Matches 15; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 3372 TAACGTAACTATTGCAAAAT 3394
 DB 23 TAACGTCAATGCTCTGAAAAT 1

RESULT 182
 US-09-555-640-118
 ; Sequence 118, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.2; DB 1; Length 26;
 Best Local Similarity 80.0%; Pred. No. 3.7e+02;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2148 CAGTGGGAGAGGTT 2162
 DB 8 CGGTGGGTGACGGT 22

RESULT 183
 US-09-555-640-120
 ; Sequence 120, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.2; DB 1; Length 27;
 Best Local Similarity 80.0%; Pred. No. 3.6e+02;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2148 CAGTGGGAGAGGTT 2162
 DB 9 CGGTGGGTGACGGT 23

RESULT 184
 US-09-555-640-119/c
 ; Sequence 119, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 10.2; DB 1; Length 29;
 Best Local Similarity 80.0%; Pred. No. 3.4e+02;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4353 GGTGGGTTTGATC 4367
 DB 19 GCTGGGGTATGATC 5

```

RESULT 185
US-09-555-640-108
; Sequence 108, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match          0.2%; Score 10; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

```

```

QY      834 TCGGCGAGGAGCTTGCA 851
Db      2 TCGGCGAGGCGCGCTGTAA 19

```

```

RESULT 186
US-09-555-640-110
; Sequence 110, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match          0.2%; Score 10; DB 1; Length 21;
Best Local Similarity 72.2%; Pred. No. 4.4e+02;
Matches 13; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

```

```

QY      834 TCGGCGAGGAGCTTGCA 851
Db      2 TCGGCGAGGCGCGCTGTAA 19

```

```

RESULT 187
US-09-555-640-15/C
; Sequence 15, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match          0.2%; Score 10; DB 1; Length 24;
Best Local Similarity 72.2%; Pred. No. 4e+02;
Matches 13; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

```

```

QY      970 AAGTTTCAACCATGCTGA 987
Db      24 AATTTTCATCCATTTATA 7

```

```

RESULT 188
US-09-555-640-41/C
; Sequence 41, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine

```

```

; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match          0.2%; Score 10; DB 1; Length 30;
Best Local Similarity 61.5%; Pred. No. 3.3e+02;
Matches 16; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

```

```

QY      1238 TTTAGCGGCTCAACATGCTTAAG 1263
Db      27 TTACAAAGGTGCACACGCTTTGG 2

```

```

RESULT 189
US-09-555-640-76/C
; Sequence 76, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match          0.2%; Score 10; DB 1; Length 30;
Best Local Similarity 72.2%; Pred. No. 3.3e+02;
Matches 13; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

```

```

QY      2830 AATCTTATACATTTG 2847
Db      24 AATCTTCTACCCCTTG 7

```

```

RESULT 190
US-09-555-640-7/C
; Sequence 7, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

```

Query Match          0.2%; Score 9.8; DB 1; Length 21;
Best Local Similarity 66.7%; Pred. No. 4.4e+02;
Matches 14; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

```

```

QY      1829 CCCCATTGTCCAGACCA 1849
Db      21 CCAGCTTTGTGATACCA 1

```

```

RESULT 191
US-09-555-640-115/C
; Sequence 115, Application US/09555640
; GENERAL INFORMATION:
; APPLICANT: NGUYEN, Quang Tri
; APPLICANT: GARBARG-CHENON, Antoine
; APPLICANT: AUGUSTE, Veronique
; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
; TITLE OF INVENTION: Erythrovirus and its applications
; FILE REFERENCE: 45636-5033-US
; CURRENT APPLICATION NUMBER: US/09/555,640
; CURRENT FILING DATE: 2000-08-10

```

Query Match 0.2%; Score 9.8; DB 1; Length 21;
 Best Local Similarity 66.7%; Pred. No. 4.4e+02;
 Matches 14; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 3548 GTTACTTCCCGCCAGTAT 3568
 DB 21 GTGTAGTTATTGCCAGATT 1

RESULT 192
 US-09-555-640-17/c
 ; Sequence 17, Application US/09555640
 ; GENERAL INFORMATION:

; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.6; DB 1; Length 18;
 Best Local Similarity 75.0%; Pred. No. 5e+02;
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 3137 TCTAGGCATTTTTAA 3152
 DB 17 TCTGAGAGTTTAA 2

RESULT 193
 US-09-555-640-14/c
 ; Sequence 14, Application US/09555640
 ; GENERAL INFORMATION:

; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.6; DB 1; Length 20;
 Best Local Similarity 75.0%; Pred. No. 4.6e+02;
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1969 ACCAGTTCCAGAGAT 1984
 DB 17 AACGTTCCAGAACT 2

RESULT 194
 US-09-555-640-16/c
 ; Sequence 16, Application US/09555640
 ; GENERAL INFORMATION:

; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.6; DB 1; Length 26;
 Best Local Similarity 62.5%; Pred. No. 3.8e+02;
 Matches 15; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

QY 2554 TCCAGACCTATATATGATCATTT 2577
 DB 24 TCCAGACAGGTAGACATTTT 1

RESULT 195
 US-09-555-640-20/c
 ; Sequence 20, Application US/09555640
 ; GENERAL INFORMATION:

; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.4; DB 1; Length 19;
 Best Local Similarity 68.4%; Pred. No. 4.8e+02;
 Matches 13; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 3928 TTCTATACAGGTCTGCA 3946
 DB 19 TTCTCTTAGGTCTGCA 1

RESULT 196
 US-09-555-640-113/c
 ; Sequence 113, Application US/09555640
 ; GENERAL INFORMATION:

; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.4; DB 1; Length 19;
 Best Local Similarity 90.9%; Pred. No. 4.8e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1997 GCCCAGTTTC 2007
 DB 17 GCCCAGTTTC 7

RESULT 197
 US-09-555-640-31/c
 ; Sequence 31, Application US/09555640
 ; GENERAL INFORMATION:

; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.4; DB 1; Length 20;
 Best Local Similarity 90.9%; Pred. No. 4.6e+02;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4063 AAATGCCATTT 4073
 DB 19 AAATGCCATTT 9

RESULT 198
 US-09-555-640-64/c
 ; Sequence 64, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri

APPLICANT: GARBARG-CHENON, Antoine
 APPLICANT: AUGUSTE, Veronique
 APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 TITLE OF INVENTION: Erythrovirus and its applications
 FILE REFERENCE: 45636-5033-US
 CURRENT APPLICATION NUMBER: US/09/555,640
 CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.4; DB 1; Length 22;
 Best Local Similarity 68.4%; Pred. No. 4.3e+02;
 Matches 13; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 2315 GATTACAAAGTTTGTGAGA 2333
 DB 19 GACTATATATAGTGTGAGA 1

RESULT 199
 US-09-555-640-105/c
 ; Sequence 105, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.2; DB 1; Length 19;
 Best Local Similarity 78.6%; Pred. No. 4.9e+02;
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1438 TGGGATGAGGCAT 1451
 DB 19 TGGGTGAGGCGCAT 6

RESULT 200
 US-09-555-640-111/c
 ; Sequence 111, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.2; DB 1; Length 19;
 Best Local Similarity 78.6%; Pred. No. 4.9e+02;
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3471 TAGTGATCATGAG 3484
 DB 19 TACTGATGATGAG 6

RESULT 201
 US-09-555-640-114
 ; Sequence 114, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.2; DB 1; Length 19;
 Best Local Similarity 78.6%; Pred. No. 4.9e+02;
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 277 TTCTTTCGCTGCTA 290
 DB 5 TTCTTCATCTGCTA 18

RESULT 202
 US-09-555-640-27/c
 ; Sequence 27, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.2; DB 1; Length 23;
 Best Local Similarity 78.6%; Pred. No. 4.2e+02;
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 494 ATTTTACTGGGGCGG 507
 DB 19 ATTTTCTGAGGCG 6

RESULT 203
 US-09-555-640-12/c
 ; Sequence 12, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9.2; DB 1; Length 25;
 Best Local Similarity 78.6%; Pred. No. 3.9e+02;
 Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4989 GTACAAATGGCGG 5002
 DB 21 GTACTAGAGGCGG 8

RESULT 204
 US-09-555-640-9/c
 ; Sequence 9, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match 0.2%; Score 9; DB 1; Length 17;
 Best Local Similarity 70.6%; Pred. No. 5.3e+02;
 Matches 12; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1318 AGTACTGAAAACCAA 1334

DB 17 ATCCAGGGAATCAAA 1

RESULT 205

US-09-555-640-109
 ; Sequence 109, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match

0.2%; Score 9; DB 1; Length 20;
 Best Local Similarity 70.6%; Pred. No. 4.7e+02;
 Matches 12; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 420 TTCTGACTGGGACCAC 436
 DB 2 TCCAGACGGTAAGCAC 18

RESULT 206

US-09-555-640-116
 ; Sequence 116, Application US/09555640
 ; GENERAL INFORMATION:
 ; APPLICANT: NGUYEN, Quang Tri
 ; APPLICANT: GARBARG-CHENON, Antoine
 ; APPLICANT: AUGUSTE, Veronique
 ; APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
 ; TITLE OF INVENTION: Erythrovirus and its applications
 ; FILE REFERENCE: 45636-5033-US
 ; CURRENT APPLICATION NUMBER: US/09/555,640
 ; CURRENT FILING DATE: 2000-08-10

Query Match

0.2%; Score 8.8; DB 1; Length 20;
 Best Local Similarity 83.3%; Pred. No. 4.7e+02;
 Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 31 CATCTGTACCG 42
 DB 4 CATCTGTACCG 15

Search completed: April 22, 2004, 06:46:29
 Job time : 38 secs

THIS PAGE BLANK (USPTO)

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 22, 2004, 06:30:08 ; Search time 7 Seconds
(without alignments)
3.975 Million cell updates/sec

Title: us-09-555-640-1
Perfect score: 5028
Sequence: 1 gagctcacaggaatgacgt.....acgtcatctcctgtgacgc 5028

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 126 segs, 2767 residues
Total number of hits satisfying chosen parameters: 252

Minimum DB seg length: 10
Maximum DB seg length: 30

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 131 summaries

Database : rge.seq:*
Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	30	0.6	30	1	AX003461
2	30	0.6	30	1	AX003466
3	30	0.6	30	1	AX003476
4	30	0.6	30	1	AX003481
5	30	0.6	30	1	AX003486
6	30	0.6	30	1	AX003496
7	30	0.6	30	1	BD087077
8	30	0.6	30	1	BD087082
9	30	0.6	30	1	BD087092
10	30	0.6	30	1	BD087097
11	30	0.6	30	1	BD087102
12	30	0.6	30	1	BD087112
13	29	0.6	29	1	AX003423
14	29	0.6	29	1	AX003460
15	29	0.6	29	1	BD087039
16	29	0.6	29	1	BD087075
17	28	0.6	28	1	AX003477
18	28	0.6	28	1	BD087093
19	26	0.5	26	1	AX003436
20	26	0.5	26	1	AX003448
21	26	0.5	26	1	AX003453
22	26	0.5	26	1	BD087052
23	26	0.5	26	1	BD087064
24	26	0.5	26	1	BD087069
25	25	0.5	25	1	AX003432
26	25	0.5	25	1	BD087048
27	24.4	0.5	26	1	E35607
28	24.4	0.5	26	1	AX028850
29	24	0.5	24	1	AX003435
30	24	0.5	24	1	AX003452
31	24	0.5	24	1	BD087051
32	24	0.5	24	1	BD087068
33	23	0.5	23	1	AX003422

34	23	0.5	23	1	AX003430	ACCESSION:AX003430
35	23	0.5	23	1	AX003445	ACCESSION:AX003445
36	23	0.5	23	1	AX003447	ACCESSION:AX003447
37	23	0.5	23	1	AX003449	ACCESSION:AX003449
38	23	0.5	23	1	AX003455	ACCESSION:AX003455
39	23	0.5	23	1	AX003458	ACCESSION:AX003458
40	23	0.5	23	1	AX003485	ACCESSION:AX003485
41	23	0.5	23	1	BD087038	ACCESSION:BD087038
42	23	0.5	23	1	BD087046	ACCESSION:BD087046
43	23	0.5	23	1	BD087061	ACCESSION:BD087061
44	23	0.5	23	1	BD087063	ACCESSION:BD087063
45	23	0.5	23	1	BD087065	ACCESSION:BD087065
46	23	0.5	23	1	BD087071	ACCESSION:BD087071
47	23	0.5	23	1	BD087074	ACCESSION:BD087074
48	23	0.5	23	1	BD087101	ACCESSION:BD087101
49	22.4	0.4	24	1	A2327	ACCESSION:A2327
50	22.4	0.4	24	1	A66531	ACCESSION:A66531
51	22	0.4	22	1	AR430269	ACCESSION:AR430269
52	22	0.4	22	1	AX003444	ACCESSION:AX003444
53	22	0.4	22	1	AX003464	ACCESSION:AX003464
54	22	0.4	22	1	AX088167	ACCESSION:AX088167
55	22	0.4	22	1	BD087060	ACCESSION:BD087060
56	22	0.4	22	1	BD087100	ACCESSION:BD087100
57	21.4	0.4	23	1	AR371201	ACCESSION:AR371201
58	21	0.4	21	1	AX003427	ACCESSION:AX003427
59	21	0.4	21	1	AX003456	ACCESSION:AX003456
60	21	0.4	21	1	AX003462	ACCESSION:AX003462
61	21	0.4	21	1	AX003526	ACCESSION:AX003526
62	21	0.4	21	1	AX003530	ACCESSION:AX003530
63	21	0.4	21	1	AX003535	ACCESSION:AX003535
64	21	0.4	21	1	BD087043	ACCESSION:BD087043
65	21	0.4	21	1	BD087072	ACCESSION:BD087072
66	21	0.4	21	1	BD087078	ACCESSION:BD087078
67	21	0.4	21	1	BD087125	ACCESSION:BD087125
68	21	0.4	21	1	BD087129	ACCESSION:BD087129
69	21	0.4	21	1	BD087134	ACCESSION:BD087134
70	20	0.4	20	1	AR371205	ACCESSION:AR371205
71	20	0.4	20	1	AR430270	ACCESSION:AR430270
72	20	0.4	20	1	AX003425	ACCESSION:AX003425
73	20	0.4	20	1	AX003426	ACCESSION:AX003426
74	20	0.4	20	1	AX003434	ACCESSION:AX003434
75	20	0.4	20	1	AX003451	ACCESSION:AX003451
76	20	0.4	20	1	AX003527	ACCESSION:AX003527
77	20	0.4	20	1	AX003529	ACCESSION:AX003529
78	20	0.4	20	1	AX003532	ACCESSION:AX003532
79	20	0.4	20	1	AX003536	ACCESSION:AX003536
80	20	0.4	20	1	AX088168	ACCESSION:AX088168
81	20	0.4	20	1	BD087041	ACCESSION:BD087041
82	20	0.4	20	1	BD087042	ACCESSION:BD087042
83	20	0.4	20	1	BD087050	ACCESSION:BD087050
84	20	0.4	20	1	BD087067	ACCESSION:BD087067
85	20	0.4	20	1	BD087126	ACCESSION:BD087126
86	20	0.4	20	1	BD087128	ACCESSION:BD087128
87	20	0.4	20	1	BD087131	ACCESSION:BD087131
88	20	0.4	20	1	BD087135	ACCESSION:BD087135
89	19	0.4	19	1	AX003438	ACCESSION:AX003438
90	19	0.4	19	1	AX003440	ACCESSION:AX003440
91	19	0.4	19	1	AX003525	ACCESSION:AX003525
92	19	0.4	19	1	AX003528	ACCESSION:AX003528
93	19	0.4	19	1	AX003531	ACCESSION:AX003531
94	19	0.4	19	1	AX003533	ACCESSION:AX003533
95	19	0.4	19	1	AX003534	ACCESSION:AX003534
96	19	0.4	19	1	BD087054	ACCESSION:BD087054
97	19	0.4	19	1	BD087056	ACCESSION:BD087056
98	19	0.4	19	1	BD087124	ACCESSION:BD087124
99	19	0.4	19	1	BD087127	ACCESSION:BD087127
100	19	0.4	19	1	BD087130	ACCESSION:BD087130
101	19	0.4	19	1	BD087132	ACCESSION:BD087132
102	19	0.4	19	1	BD087133	ACCESSION:BD087133
103	18.4	0.4	20	1	AR428702	ACCESSION:AR428702
104	18.4	0.4	20	1	AX080219	ACCESSION:AX080219
105	18.4	0.4	20	1	BD090940	ACCESSION:BD090940
106	18	0.4	18	1	AX003437	ACCESSION:AX003437

```

107 18 0.4 18 1 AX003454
108 18 0.4 18 1 BD087053
109 18 0.4 18 1 BD087070
110 17 0.3 17 1 AX003429
111 17 0.3 17 1 BD087045
112 15.4 0.3 17 1 AR046079
113 15.4 0.3 17 1 137575
114 15.4 0.3 17 1 153131
115 15.4 0.3 17 1 194425
116 15.4 0.3 17 1 AR186282
117 15.4 0.3 17 1 AR188765
118 15.4 0.3 17 1 AR190335
119 15.4 0.3 17 1 AR322913
120 15.4 0.3 17 1 AR322913
121 15.4 0.3 17 1 AR322913
122 15.4 0.3 17 1 AR322913
123 15.4 0.3 17 1 AR322913
124 15.4 0.3 17 1 AR322913
125 15.4 0.3 17 1 AR322913
126 15.4 0.3 17 1 AR322913
127 15.4 0.3 17 1 AR322913
128 15.4 0.3 17 1 AR322913
129 15.4 0.3 17 1 AR322913
130 15.4 0.3 17 1 AR322913
131 15.4 0.3 17 1 AR322913

```

ALIGNMENTS

```

RESULT 1
LOCUS AX003461
DEFINITION Sequence 41 from Patent WO928439.
VERSION AX003461.1 GI:9927265
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 41 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
source
1..30
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

```

```

Query Match
Best Local Similarity 100.0%; Pred. No. 11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4655 GCCAAGGCGGTGCGACCCATTGTAAACA 4684
DB 1 GCCAAGGCGGTGCGACCCATTGTAAACA 30

```

```

RESULT 2
LOCUS AX003466
DEFINITION Sequence 46 from Patent WO928439.
VERSION AX003466.1 GI:9927319
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.

```

```

TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 46 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
source
1..30
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

```

```

Query Match
Best Local Similarity 100.0%; Pred. No. 11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 301 ATTATCTACTTAACTTAACTACATG 330
DB 1 ATTATCTACTTAACTTAACTACATG 30

```

```

RESULT 3
LOCUS AX003476
DEFINITION Sequence 56 from Patent WO928439.
VERSION AX003476.1 GI:9927329
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 56 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
source
1..30
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

```

```

Query Match
Best Local Similarity 100.0%; Pred. No. 11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1703 ATGTACAACATGCTACTTGTGTATG 1732
DB 1 ATGTACAACATGCTACTTGTGTATG 30

```

```

RESULT 4
LOCUS AX003481
DEFINITION Sequence 61 from Patent WO928439.
VERSION AX003481.1 GI:9927334
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 61 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
source
1..30
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

```

```

Query Match
0.6%; Score 30; DB 1; Length 30;

```

Best Local Similarity 100.0%; Pred. No. 11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2306 ACCTGCTGATTAACAAGTTTGATATT 2335
DB 1 ACCTGCTGATTAACAAGTTTGATATT 30

RESULT 5
LOCUS AX003486 30 bp DNA linear PAT 07-SEP-2000

DEFINITION Sequence 66 from Patent WO928439.
ACCESSION AX003486
VERSION AX003486.1 GI:927339

KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM B19 virus

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 66 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source 1..30
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.6%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2617 ATCATCCAGTAACAGTAGTCAGAACCTAG 2646
DB 1 ATCATCCAGTAACAGTAGTCAGAACCTAG 30

RESULT 6
LOCUS AX003496 30 bp DNA linear PAT 07-SEP-2000

DEFINITION Sequence 76 from Patent WO928439.
ACCESSION AX003496
VERSION AX003496.1 GI:927349

KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM B19 virus

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 76 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source 1..30
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.6%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4115 TATCAGCAAGGGGTAGAGATTTCCAAT 4144
DB 1 TATCAGCAAGGGGTAGAGATTTCCAAT 30

RESULT 7
LOCUS BD087077 30 bp DNA linear PAT 27-AUG-2002

DEFINITION Erythrovirus and application thereof.
ACCESSION BD087077
VERSION BD087077.1 GI:22632687

KEYWORDS JP 2001525163-A/41.
SOURCE Erythrovirus
ORGANISM Erythrovirus

REFERENCE 1
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 41 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS

COMMENT OS Erythrovirus
PM JP 2001525163-A/41

PP 03-DEC-1998 JP 2000523317
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C1201/68, PC
G01N33/53

PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..30
/organism="Erythrovirus".

FEATURES
source 1..30
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.6%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4655 GCCAAAGCCGTGTGCACCCATTGTAACA 4684
DB 1 GCCAAAGCCGTGTGCACCCATTGTAACA 30

RESULT 8
LOCUS BD087082 30 bp DNA linear PAT 27-AUG-2002

DEFINITION Erythrovirus and application thereof.
ACCESSION BD087082
VERSION BD087082.1 GI:22632692

KEYWORDS JP 2001525163-A/46.
SOURCE Erythrovirus
ORGANISM Erythrovirus

REFERENCE 1
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 46 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS

COMMENT OS Erythrovirus
PM JP 2001525163-A/46
PD 11-DEC-2001
PP 03-DEC-1998 JP 2000523317
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C1201/68, PC
G01N33/53,

PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..30
/organism="Erythrovirus".

FEATURES
source 1..30
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.6%; Score 30; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 11;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 301 ATTATTAACCTTTTAACTTACTACATG 330
 Db 1 ATTATTAACCTTTTAACTTACTACATG 30

RESULT 9
 LOCUS BD087092 30 bp DNA linear PAT 27-AUG-2002
 DEFINITION Erythrovirus and application thereof.
 ACCESSION BD087092
 VERSION BD087092.1 GI:22632702
 KEYWORDS JP 2001525163-A/56.
 SOURCE Erythrovirus
 ORGANISM Erythrovirus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.

REFERENCE 1 (bases 1 to 30)
 AUTHORS Nguyen, Q.T., Garbarg, C.A. and Auguste, V.
 TITLE Erythrovirus and application thereof.
 JOURNAL Patent: JP 2001525163-A 56 11-DEC-2001;
 ASSISTANCE PUBLIQUE HOPITAUX DE PARIS

COMMENT OS Erythrovirus
 PN JP 2001525163-A/56
 PD 11-DEC-2001
 PF 03-DEC-1998 JP 2000523317
 PR 03-DEC-1997 FR 97/15197
 P1 QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
 C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC
 G01N33/53, PC
 C12N15/00
 CC Erythrovirus and application thereof
 FH Key Location/Qualifiers
 FT source 1.30
 FT Location/Qualifiers
 1.30
 /organism="Erythrovirus"
 /mol_type="genomic DNA"
 /db_xref="taxon:40121"

FEATURES
 source
 1.30
 /organism="Erythrovirus"
 /mol_type="genomic DNA"
 /db_xref="taxon:40121"

Query Match 0.6%; Score 30; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 11;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1703 ATGTACAACATGGCTAAGTGTATG 1732
 Db 1 ATGTACAACATGGCTAAGTGTATG 30

RESULT 10
 LOCUS BD087097 30 bp DNA linear PAT 27-AUG-2002
 DEFINITION Erythrovirus and application thereof.
 ACCESSION BD087097
 VERSION BD087097.1 GI:22632707
 KEYWORDS JP 2001525163-A/61.
 SOURCE Erythrovirus
 ORGANISM Erythrovirus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.

REFERENCE 1 (bases 1 to 30)
 AUTHORS Nguyen, Q.T., Garbarg, C.A. and Auguste, V.
 TITLE Erythrovirus and application thereof.
 JOURNAL Patent: JP 2001525163-A 61 11-DEC-2001;
 ASSISTANCE PUBLIQUE HOPITAUX DE PARIS

COMMENT OS Erythrovirus
 PN JP 2001525163-A/61
 PD 11-DEC-2001
 PF 03-DEC-1998 JP 2000523317
 PR 03-DEC-1997 FR 97/15197

PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
 C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC
 G01N33/53, PC
 C12N15/00
 CC Erythrovirus and application thereof
 FH Key Location/Qualifiers
 FT source 1.30
 FT Location/Qualifiers
 1.30
 /organism="Erythrovirus"
 /mol_type="genomic DNA"
 /db_xref="taxon:40121"

FEATURES
 source
 1.30
 /organism="Erythrovirus"
 /mol_type="genomic DNA"
 /db_xref="taxon:40121"

Query Match 0.6%; Score 30; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 11;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2306 ACCTGCTGGATTACAACTTTGTAGATT 2335
 Db 1 ACCTGCTGGATTACAACTTTGTAGATT 30

RESULT 11
 LOCUS BD087102 30 bp DNA linear PAT 27-AUG-2002
 DEFINITION Erythrovirus and application thereof.
 ACCESSION BD087102
 VERSION BD087102.1 GI:22632712
 KEYWORDS JP 2001525163-A/66.
 SOURCE Erythrovirus
 ORGANISM Erythrovirus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.

REFERENCE 1 (bases 1 to 30)
 AUTHORS Nguyen, Q.T., Garbarg, C.A. and Auguste, V.
 TITLE Erythrovirus and application thereof.
 JOURNAL Patent: JP 2001525163-A 66 11-DEC-2001;
 ASSISTANCE PUBLIQUE HOPITAUX DE PARIS

COMMENT OS Erythrovirus
 PN JP 2001525163-A/66
 PD 11-DEC-2001
 PF 03-DEC-1998 JP 2000523317
 PR 03-DEC-1997 FR 97/15197
 P1 QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
 C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC
 G01N33/53, PC
 C12N15/00
 CC Erythrovirus and application thereof
 FH Key Location/Qualifiers
 FT source 1.30
 FT Location/Qualifiers
 1.30
 /organism="Erythrovirus"
 /mol_type="genomic DNA"
 /db_xref="taxon:40121"

FEATURES
 source
 1.30
 /organism="Erythrovirus"
 /mol_type="genomic DNA"
 /db_xref="taxon:40121"

Query Match 0.6%; Score 30; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 11;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2617 ATCATCCAGTAACAGTAGGAGAACTAG 2646
 Db 1 ATCATCCAGTAACAGTAGGAGAACTAG 30

RESULT 12
 LOCUS BD087112 30 bp DNA linear PAT 27-AUG-2002
 DEFINITION Erythrovirus and application thereof.
 ACCESSION BD087112
 VERSION BD087112.1 GI:22632722
 KEYWORDS JP 2001525163-A/76.

SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1 (bases 1 to 30)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 76 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/76
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..30
FT /organism='Erythrovirus'.
Location/Qualifiers
1..30
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.6%; Score 29; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4115 TATCAGCAGGGGTAGAGATTCCCAAT 4144
DB 1 TATCAGCAGGGGTAGAGATTCCCAAT 30

RESULT 13
AX003423
LOCUS AX003423 29 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 3 from Patent WO9928439.
ACCESSION AX003423
VERSION AX003423.1 GI:9272227
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 3 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
Location/Qualifiers
1..29
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

FEATURES
source
1..29
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.6%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 718 TTTAGAGATGAGAGCAGTTTATGAAA 746
DB 1 TTTAGAGATGAGAGCAGTTTATGAAA 29

RESULT 14
AX003460 29 bp DNA linear PAT 07-SEP-2000
LOCUS AX003460
DEFINITION Sequence 40 from Patent WO9928439.
ACCESSION AX003460
VERSION AX003460.1 GI:9272264

KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 40 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
Location/Qualifiers
1..29
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

FEATURES
source
1..29
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.6%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4625 GGATATGAAAAGCCTGAGAAATGTGAC 4653
DB 1 GGATATGAAAAGCCTGAGAAATGTGAC 29

RESULT 15
BD087039 29 bp DNA linear PAT 27-AUG-2002
LOCUS BD087039
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087039
VERSION BD087039.1 GI:22632649
KEYWORDS JP 2001525163-A/3.
SOURCE Erythrovirus
ORGANISM Erythrovirus
Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 29)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof.
JOURNAL Patent: JP 2001525163-A 3 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/3
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..29
FT /organism='Erythrovirus'.
Location/Qualifiers
1..29
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

FEATURES
source
1..29
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.6%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 718 TTTAGAGATGAGAGCAGTTTATGAAA 746
DB 1 TTTAGAGATGAGAGCAGTTTATGAAA 29

RESULT 16
BD087076 29 bp DNA linear PAT 27-AUG-2002
LOCUS BD087076
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087076

```

VERSION      BD087076.1 GI:22632686
KEYWORDS     JP 2001525163-A/40.
SOURCE       Erythrovirus
ORGANISM     Erythrovirus
REFERENCE    1 (bases 1 to 29)
AUTHORS      Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE        Erythrovirus and application thereof
JOURNAL      Patent: JP 2001525163-A 40 11-DEC-2001;
              ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT      OS Erythrovirus
              PN JP 2001525163-A/40
              PD 11-DEC-2001
              PF 03-DEC-1998 JP 2000523317
              PR 03-DEC-1997 FR 97/15197
              PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
              C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC
              GO1N3/53,
              PC C12N15/00
              CC Erythrovirus and application thereof
              FH Key
              FT source
              Location/Qualifiers
                location= 'Erythrovirus'.
                /organism= 'Erythrovirus'.
                /mol_type= 'genomic DNA'
                /db_xref= 'taxon:40121'

FEATURES
  source
    Query Match
    Best Local Similarity 0.6%; Score 29; DB 1; Length 29;
    Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4625 GCATATGAAAGCCTGAGAAATTGCGAC 4653
Db 1 GGATATGAAAGCCTGAGAAATTGCGAC 29

RESULT 17
LOCUS       AX003477
DEFINITION Sequence 57 from Patent WO9928439.
ACCESSION   AX003477
VERSION     AX003477.1 GI:9927330
KEYWORDS
SOURCE      B19 virus
ORGANISM    B19 virus
REFERENCE    1
AUTHORS      Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE        Erythrovirus and its applications
JOURNAL      Patent: WO 9928439-A 57 10-JUN-1999;
              ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
              CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
  source
    Query Match
    Best Local Similarity 0.6%; Score 28; DB 1; Length 28;
    Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1733 CACAAAGCTGGAGCCACTATGAAAACCTG 1760
Db 1 CACAAAGCTGGAGCCACTATGAAAACCTG 28

RESULT 18
LOCUS       BD087093
DEFINITION Erythrovirus and application thereof.

```

```

ACCESSION    BD087093
VERSION      BD087093.1 GI:22632703
KEYWORDS     JP 2001525163-A/57.
SOURCE       Erythrovirus
ORGANISM     Erythrovirus
REFERENCE    1 (bases 1 to 28)
AUTHORS      Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE        Erythrovirus and application thereof
JOURNAL      Patent: JP 2001525163-A 57 11-DEC-2001;
              ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT      OS Erythrovirus
              PN JP 2001525163-A/57
              PD 11-DEC-2001
              PF 03-DEC-1998 JP 2000523317
              PR 03-DEC-1997 FR 97/15197
              PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
              C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC
              GO1N3/53,
              PC C12N15/00
              CC Erythrovirus and application thereof
              FH Key
              FT source
              Location/Qualifiers
                location= 'Erythrovirus'.
                /organism= 'Erythrovirus'.
                /mol_type= 'genomic DNA'
                /db_xref= 'taxon:40121'

FEATURES
  source
    Query Match
    Best Local Similarity 0.6%; Score 28; DB 1; Length 28;
    Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1733 CACAAAGCTGGAGCCACTATGAAAACCTG 1760
Db 1 CACAAAGCTGGAGCCACTATGAAAACCTG 28

RESULT 19
LOCUS       AX003436
DEFINITION Sequence 16 from Patent WO9928439.
ACCESSION   AX003436
VERSION     AX003436.1 GI:9927240
KEYWORDS
SOURCE      B19 virus
ORGANISM    B19 virus
REFERENCE    1
AUTHORS      Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE        Erythrovirus and its applications
JOURNAL      Patent: WO 9928439-A 16 10-JUN-1999;
              ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
              CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
  source
    Query Match
    Best Local Similarity 0.5%; Score 26; DB 1; Length 26;
    Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2293 AAAAATGCTTACCTGCTGGATT 2318
Db 1 AAAAATGCTTACCTGCTGGATT 26

RESULT 20
LOCUS       AX003448
DEFINITION Erythrovirus and application thereof.

```

DEFINITION Sequence 28 from Patent WO928439.
ACCESSION AX003448
VERSION AX003448.1 GI:9927252
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 28 10-JUN-1999;
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
location/Qualifiers
FEATURES
source 1..26
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"
Query Match 0.5%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3032 TCTGCAGAGCCAGCACTGCTGCAGG 3057
DB 1 TCTGCAGAGCCAGCACTGCTGCAGG 26
RESULT 21
AX003453 26 bp DNA linear PAT 07-SEP-2000
LOCUS
DEFINITION Sequence 33 from Patent WO928439.
ACCESSION AX003453
VERSION AX003453.1 GI:9927257
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 33 10-JUN-1999;
ASSIST PUBL. HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
location/Qualifiers
FEATURES
source 1..26
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"
Query Match 0.5%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4133 AGATTTCCAAATGAAAAAGAACGCT 4158
DB 1 AGATTTCCAAATGAAAAAGAACGCT 26
RESULT 22
BD087052 26 bp DNA linear PAT 27-AUG-2002
LOCUS
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087052
VERSION BD087052.1 GI:22632662
KEYWORDS JP 2001525163-A/16.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 16 11-DEC-2001;

COMMENT ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/16
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key location/Qualifiers
FT source 1..26
/organism="Erythrovirus".
location/Qualifiers
FEATURES
source 1..26
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"
Query Match 0.5%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3032 TCTGCAGAGCCAGCACTGCTGCAGG 3057
DB 1 TCTGCAGAGCCAGCACTGCTGCAGG 26
RESULT 24
BD087064 26 bp DNA linear PAT 27-AUG-2002
LOCUS
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087064
VERSION BD087064.1 GI:22632674
KEYWORDS JP 2001525163-A/28.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 28 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/28
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key location/Qualifiers
FT source 1..26
/organism="Erythrovirus".
location/Qualifiers
FEATURES
source 1..26
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

BD087069 26 bp DNA linear PAT 27-AUG-2002
LOCUS BD087069
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087069.1 GI:22632679
VERSION JP 2001525163-A/33.
KEYWORDS Erythrovirus
SOURCE Erythrovirus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 26)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 33 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/33
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..26 /organism='Erythrovirus'.
FEATURES
source location/Qualifiers
1..26 /organism='Erythrovirus'
/mol_type='genomic DNA'
/db_xref='taxon:40121'
Query Match 0.5%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4133 AGATTTCGAATGAAAAAGACAGCT 4158
Db 1 AGATTTCGAATGAAAAAGACAGCT 26
RESULT 25
AX003432 25 bp DNA linear PAT 07-SEP-2000
LOCUS AX003432
DEFINITION Sequence 12 from Patent WO928439.
ACCESSION AX003432
VERSION AX003432.1 GI:9927236
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 12 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
source location/Qualifiers
1..25 /organism='B19 virus'
/mol_type='unassigned DNA'
/db_xref='taxon:10798'
Query Match 0.5%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1935 TGAACCCCGCGCTCTAGTAGCCCC 1959
Db 1 TGAACCCCGCGCTCTAGTAGCCCC 25

RESULT 26
BD087048 25 bp DNA linear PAT 27-AUG-2002
LOCUS BD087048
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087048.1 GI:22632658
VERSION JP 2001525163-A/12.
KEYWORDS Erythrovirus
SOURCE Erythrovirus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 25)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 12 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/12
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..25 /organism='Erythrovirus'.
FEATURES
source location/Qualifiers
1..25 /organism='Erythrovirus'
/mol_type='genomic DNA'
/db_xref='taxon:40121'
Query Match 0.5%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1935 TGAACCCCGCGCTCTAGTAGCCCC 1959
Db 1 TGAACCCCGCGCTCTAGTAGCCCC 25
RESULT 27
E35607 26 bp DNA linear PAT 18-JUN-2001
LOCUS E35607
DEFINITION Method for detecting high viral concentration in plasma and/or
ACCESSION E35607
VERSION E35607.1 GI:13019101
KEYWORDS JP 1999225797-A/3.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 26)
AUTHORS Thomas,V. and Albrecht,G.
TITLE Method for detecting high viral concentration in plasma and/or
JOURNAL serum by using polymerase chain reaction
Patent: JP 1999225797-A 3 24-AUG-1999;
CENTEON PHARMA GMBH
COMMENT OS unidentified
PN JP 1999225797-A/3
PD 24-AUG-1999
PF 27-NOV-1998 JP 1998336431
PR 28-NOV-1997 DE 19752898.8
PI THOMAS VAIMA,ALBRECHT GROENR
PC C12Q1/68//C12N15/09,C12N15/00
CC Strandness: Single;
CC Topology: Linear;
FH key Location/Qualifiers
FT source 1..26 /organism='Unidentified'.
FEATURES
location/Qualifiers


```
source
1..26
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

Query Match
Best Local Similarity 0.5%; Score 24.4; DB 1; Length 26;
Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1430 TGGTGGCTGGGATGAAGCATTATT 1455
1 TGGTGGCTGGGATGAAGCATTATT 26

RESULT 28
AX022850 26 bp DNA linear PAT 24-NOV-2000
LOCUS Sequence 3 from Patent EP0922771.
ACCESSION AX022850
VERSION AX022850.1 GI:10046343
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1
AUTHORS Groener,A.D. and Weimer,T.D.
TITLE Method for the detection of large concentrations of a virus in
blood plasma and/ or blood serum using the polymerase chain
reaction
Patent: EP 0922771-A 3 16-JUN-1999;
CENTEON PHARMA GMBH (DE)

FEATURES
source
location/Qualifiers
1..26
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

Query Match
Best Local Similarity 0.5%; Score 24.4; DB 1; Length 26;
Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1430 TGGTGGCTGGGATGAAGCATTATT 1455
1 TGGTGGCTGGGATGAAGCATTATT 26

Db 1 TGGTGGCTGGGATGAAGCATTATT 26

RESULT 29
AX003435 24 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 15 from Patent WO928439.
ACCESSION AX003435
VERSION AX003435.1 GI:9927239
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
Patent: WO 928439-A 15 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source
location/Qualifiers
1..24
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
Best Local Similarity 0.5%; Score 24; DB 1; Length 24;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2194 GCTTGATATGATGATGAATTT 2217
```

```
Db 1 GCTTGATATGATGATGAATTT 24

RESULT 30
AX003452 24 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 32 from Patent WO928439.
ACCESSION AX003452
VERSION AX003452.1 GI:9927256
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
Patent: WO 928439-A 32 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source
location/Qualifiers
1..24
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
Best Local Similarity 0.5%; Score 24; DB 1; Length 24;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4106 GACAAAGATATCAGCAGGGGTA 4129
1 GACAAAGATATCAGCAGGGGTA 24

RESULT 31
BD087051 24 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
ACCESSION BD087051
VERSION BD087051.1 GI:22632661
KEYWORDS JP 2001525163-A/15.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
Patent: JP 2001525163-A 15 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/15
PD 11-DEC-2001
PR 03-DEC-1998 JP 2000523317
PT QUANG TRI NGUYEN CHENON ANTOINE GARBARG VERONIQUE AUGUSTE PC
CI2N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
GOIN3/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key location/Qualifiers
FT source 1..24
/organism="Erythrovirus"
location/Qualifiers
1..24
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match
Best Local Similarity 0.5%; Score 24; DB 1; Length 24;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 2194 GCTTGATATAGATGGAATTT 2217
 Db 1 GCTTGATATAGATGGAATTT 24

RESULT 32
 LOCUS BD087068 24 bp DNA linear PAT 27-AUG-2002
 DEFINITION Erythrovirus and application thereof.
 ACCESSION BD087068
 VERSION BD087068.1 GI:22632678
 KEYWORDS JP 2001525163-A/32.
 SOURCE Erythrovirus
 ORGANISM Erythrovirus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.

REFERENCE
 1 (bases 1 to 24)
 AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
 TITLE Erythrovirus and application thereof
 JOURNAL Patent: JP 2001525163-A 32 11-DEC-2001;
 ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
 OS Erythrovirus
 PN JP 2001525163-A/32
 PD 11-DEC-2001
 PF 03-DEC-1998 JP 2000523317
 PR 03-DEC-1997 FR 97/15197
 PI QUANG TRI NGUYEN,CHENON ANTOINE,GARBARG,VERONIQUE,AUGUSTE PC
 C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
 G01N33/53,
 PC C12N15/00
 CC Erythrovirus and application thereof
 FH Key Location/Qualifiers
 FT source 1..24
 FT Location/Qualifiers
 1..24
 /organism="Erythrovirus"
 /mol_type="genomic DNA"
 /db_xref="taxon:40121"

Query Match 0.5%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 27;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4106 GACAAAGATATCAGCAGGGGTA 4129
 Db 1 GACAAAGATATCAGCAGGGGTA 24

RESULT 33
 LOCUS AX003422 23 bp DNA linear PAT 07-SEP-2000
 DEFINITION Sequence 2 from Patent WO928439.
 ACCESSION AX003422
 VERSION AX003422.1 GI:9927226
 KEYWORDS
 SOURCE B19 virus
 ORGANISM B19 virus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE
 1
 AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
 TITLE Erythrovirus and its applications
 JOURNAL Patent: WO 9928439-A 2 10-JUN-1999;
 ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
 CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
 Location/Qualifiers
 1..23
 /organism="B19 virus"
 /mol_type="unassigned DNA"
 /db_xref="taxon:10798"

Query Match 0.5%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 31;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 418 ACTTGTGACTGGAGACCACTAAC 440
 Db 1 ACTTGTGACTGGAGACCACTAAC 23

RESULT 34
 LOCUS AX003430 23 bp DNA linear PAT 07-SEP-2000
 DEFINITION Sequence 10 from Patent WO9928439.
 ACCESSION AX003430
 VERSION AX003430.1 GI:9927234
 KEYWORDS
 SOURCE B19 virus
 ORGANISM B19 virus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE
 1
 AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
 TITLE Erythrovirus and its applications
 JOURNAL Patent: WO 9928439-A 10 10-JUN-1999;
 ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
 CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
 Location/Qualifiers
 1..23
 /organism="B19 virus"
 /mol_type="unassigned DNA"
 /db_xref="taxon:10798"

Query Match 0.5%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 31;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2870 TTAATAAATATTAATAAATGGAAC 2892
 Db 1 TTAATAAATATTAATAAATGGAAC 23

RESULT 36
 LOCUS AX003447 23 bp DNA linear PAT 07-SEP-2000
 DEFINITION Sequence 27 from Patent WO9928439.
 ACCESSION AX003447

Qy 1795 AATGCGATGCCCTCCACCCAGA 1817
 Db 1 AATGCGATGCCCTCCACCCAGA 23

RESULT 35
 LOCUS AX003445 23 bp DNA linear PAT 07-SEP-2000
 DEFINITION Sequence 25 from Patent WO9928439.
 ACCESSION AX003445
 VERSION AX003445.1 GI:9927249
 KEYWORDS
 SOURCE B19 virus
 ORGANISM B19 virus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE
 1
 AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
 TITLE Erythrovirus and its applications
 JOURNAL Patent: WO 9928439-A 25 10-JUN-1999;
 ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
 CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
 Location/Qualifiers
 1..23
 /organism="B19 virus"
 /mol_type="unassigned DNA"
 /db_xref="taxon:10798"

Query Match 0.5%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 31;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

VERSION AX003447.1 GI:9927251
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 27 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source 1..23
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2990 TACACGCTCAGAAAAATACCC 3012
1 TACACGCTCAGAAAAATACCC 23

RESULT 37
AX003449 23 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 29 from Patent WO9928439.
DEFINITION AX003449
ACCESSION AX003449.1 GI:9927253
VERSION
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 29 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source 1..23
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3284 TTGATTTTAAATGCTTAAATTT 3306
1 TTGATTTTAAATGCTTAAATTT 23

RESULT 38
AX003455 23 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 35 from Patent WO9928439.
DEFINITION AX003455
ACCESSION AX003455.1 GI:9927259
VERSION
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 35 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source Location/Qualifiers
1..23
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4313 TTGATGACAGTTTAAACTCA 4335
1 TTGATGACAGTTTAAACTCA 23

RESULT 39
AX003458 23 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 38 from Patent WO9928439.
DEFINITION AX003458
ACCESSION AX003458.1 GI:9927262
VERSION
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 38 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source 1..23
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4433 ATGGAAATTAATCTTAACTCA 4455
1 ATGGAAATTAATCTTAACTCA 23

RESULT 40
AX003485 23 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 65 from Patent WO9928439.
DEFINITION AX003485
ACCESSION AX003485.1 GI:9927338
VERSION
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 65 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source 1..23
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2574 ATTTGAGAGCATGACAGTTA 2596

```

Db      1  ATTTGAGAGCCATGACAGTTA 23
|||||
RESULT 41
BD087038
LOCUS   BD087038          23 bp    DNA          linear    PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087038
VERSION   BD087038.1 GI:22632648
KEYWORDS  JP 2001525163-A/2.
SOURCE    Erythrovirus
ORGANISM  Erythrovirus
          Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 23)
AUTHORS   Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE     Erythrovirus and application thereof.
JOURNAL   Patent: JP 2001525163-A 2 11-DEC-2001;
          ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT   OS Erythrovirus
          PN JP 2001525163-A/2
          PD 11-DEC-2001
          PE 03-DEC-1998 JP 2000523317
          PF 03-DEC-1997 FR 97/15197
          PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
          CI2N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68,PC
          G01N33/53.
          CC Erythrovirus and application thereof
          FH Key
          FT source
          location/Qualifiers
          1..23
          /organism="Erythrovirus"
          /mol_type="genomic DNA"
          /db_xref="taxon:40121"

Query Match          0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy      418  ACTTGTGACTGGAGACCACTTAC 440
|||||
Db      1  ACTTGTGACTGGAGACCACTTAC 23
|||||

RESULT 42
BD087046
LOCUS   BD087046          23 bp    DNA          linear    PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087046
VERSION   BD087046.1 GI:22632656
KEYWORDS  JP 2001525163-A/10.
SOURCE    Erythrovirus
ORGANISM  Erythrovirus
          Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 23)
AUTHORS   Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE     Erythrovirus and application thereof.
JOURNAL   Patent: JP 2001525163-A 10 11-DEC-2001;
          ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT   OS Erythrovirus
          PN JP 2001525163-A/10
          PD 11-DEC-2001
          PE 03-DEC-1998 JP 2000523317
          PF 03-DEC-1997 FR 97/15197
          PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
          CI2N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68,PC
          G01N33/53.
          CC Erythrovirus and application thereof
          FH Key
          FT source
          location/Qualifiers
          1..23
          /organism="Erythrovirus"
          /mol_type="genomic DNA"
          /db_xref="taxon:40121"

```

```

FEATURES
source      1..23
            /organism="Erythrovirus"
            location/Qualifiers
            1..23
            /organism="Erythrovirus"
            /mol_type="genomic DNA"
            /db_xref="taxon:40121"

Query Match          0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy      2670  TTAATAAATATATAAATAATGAAC 2892
|||||
Db      1  TTAATAAATATATAAATAATGAAC 23
|||||

RESULT 43
BD087061
LOCUS   BD087061          23 bp    DNA          linear    PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087061
VERSION   BD087061.1 GI:22632671
KEYWORDS  JP 2001525163-A/25.
SOURCE    Erythrovirus
ORGANISM  Erythrovirus
          Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 23)
AUTHORS   Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE     Erythrovirus and application thereof.
JOURNAL   Patent: JP 2001525163-A 25 11-DEC-2001;
          ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT   OS Erythrovirus
          PN JP 2001525163-A/25
          PD 11-DEC-2001
          PE 03-DEC-1998 JP 2000523317
          PF 03-DEC-1997 FR 97/15197
          PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
          CI2N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68,PC
          G01N33/53.
          CC Erythrovirus and application thereof
          FH Key
          FT source
          location/Qualifiers
          1..23
          /organism="Erythrovirus"
          /mol_type="genomic DNA"
          /db_xref="taxon:40121"

Query Match          0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy      2670  TTAATAAATATATAAATAATGAAC 2892
|||||
Db      1  TTAATAAATATATAAATAATGAAC 23
|||||

RESULT 44
BD087063
LOCUS   BD087063          23 bp    DNA          linear    PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087063
VERSION   BD087063.1 GI:22632673
KEYWORDS  JP 2001525163-A/27.
SOURCE    Erythrovirus
ORGANISM  Erythrovirus
          Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 23)
AUTHORS   Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE     Erythrovirus and application thereof.

```

JOURNAL Patent: JP 2001525163-A 27 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/27
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C1201/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..23
/organism='Erythrovirus',
Location/Qualifiers

FEATURES
source 1..23
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2990 TACAACGCTCAGAAAATATACC 3012
DB 1 TACAACGCTCAGAAAATATACC 23

RESULT 45
BD087065 23 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
DEFINITION BD087065
ACCESSION BD087065.1 GI:22632675
VERSION JP 2001525163-A/29.
KEYWORDS Erythrovirus
SOURCE Erythrovirus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 23)
AUTHORS Nguyen, O.T., Garbarg, C.A. and Auguste, V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 29 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/29
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C1201/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..23
/organism='Erythrovirus',
Location/Qualifiers

FEATURES
source 1..23
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3284 TTGATTTTAACTTTAAATTT 3306
DB 1 TTGATTTTAACTTTAAATTT 23

RESULT 46
BD087071 23 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
DEFINITION BD087071
ACCESSION BD087071.1 GI:22632681
VERSION JP 2001525163-A/35.
KEYWORDS Erythrovirus
SOURCE Erythrovirus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 23)
AUTHORS Nguyen, O.T., Garbarg, C.A. and Auguste, V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 35 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/35
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C1201/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..23
/organism='Erythrovirus',
Location/Qualifiers

FEATURES
source 1..23
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4313 TTGATGACAGTTTAAACTCA 4335
DB 1 TTGATGACAGTTTAAACTCA 23

RESULT 47
BD087074 23 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
DEFINITION BD087074
ACCESSION BD087074.1 GI:22632684
VERSION JP 2001525163-A/38.
KEYWORDS Erythrovirus
SOURCE Erythrovirus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 23)
AUTHORS Nguyen, O.T., Garbarg, C.A. and Auguste, V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 38 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/38
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C1201/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..23
/organism='Erythrovirus',
Location/Qualifiers

FEATURES
source 1..23
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4433 ATGGGAATTACTACTTACTTCA 4455
DB 1 ATGGGAATTACTACTTACTTCA 23

RESULT 48

BD087101 23 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
DEFINITION BD087101
ACCESSION BD087101.1 GI:22632711
VERSION JP 2001525163-A/65.
KEYWORDS Erythrovirus
SOURCE Erythrovirus
ORGANISM

REFERENCE 1 (bases 1 to 23)
AUTHORS Nguyen, Q.T., Garbarg, C.A. and Auguste, V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 65 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITALUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/65
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PI QUNANG TRI NGUYEN, CHENON ANTOINE, GARBARG, VERONIQUE, AUGUSTE, PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..23
location/Qualifiers
1..23
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

FEATURES

source
1..23
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 31;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2574 ATTTTCAGAGCCATGAGCAGTTA 2596
DB 1 ATTTTCAGAGCCATGAGCAGTTA 23

RESULT 49

A22327/c 24 bp DNA linear PAT 05-DEC-1994
LOCUS Primer O-2 (reverse complement) from patent WO91/12269.
DEFINITION A22327
ACCESSION A22327
VERSION A22327.1 GI:833184
KEYWORDS
SOURCE
ORGANISM
synthetic construct
synthetic construct
artificial sequences.
REFERENCE 1 (bases 1 to 24)
TITLE
AUTHORS
JOURNAL
IMMUNOLOGICALLY ACTIVE PEPTIDES OR POLYPEPTIDES FROM THE PARVOVIRUS
PATENT: WO 9112269-A 15 22-AUG-1991;
location/Qualifiers
1..24

FEATURES

source
1..24

/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

Query Match 0.4%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 37;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3039 AACCCAGCACTGGTGACGCGGG 3062
DB 24 AACCCAGCACTGGTGACGCGGG 1

RESULT 50

A66531/c 24 bp DNA linear PAT 29-MAR-1999
LOCUS Sequence 2 from Patent WO9740861.
DEFINITION A66531
ACCESSION A66531
VERSION A66531.1 GI:4538085
KEYWORDS
SOURCE
ORGANISM
unidentified
unclassified

REFERENCE 1 (bases 1 to 24)
AUTHORS Barrett, N., Eibl, J., Dörner, F., Poelsler, G. and Haemmerle, T.
TITLE BIOLOGICAL MATERIAL FREE OF VIRAL AND MOLECULAR PATHOGENS AND A
PROCESS FOR THE PRODUCTION THEREOF
JOURNAL Patent: WO 9740861-A 2 06-NOV-1997
COMMENT IMUNO AG (AT)
Other publication AT 403477B 19980225
location/Qualifiers
1..24
/organism="unclassified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

FEATURES

source
1..24
/organism="unclassified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

Query Match 0.4%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 37;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1398 CTTTCATTATATGATGAGCGG 1421
DB 24 CTTTCATTATATGATGAGCGG 1

RESULT 51

AR430269 22 bp DNA linear PAT 18-DEC-2003
LOCUS Sequence 1 from patent US 6649339.
DEFINITION AR430269
ACCESSION AR430269
VERSION AR430269.1 GI:40191038
KEYWORDS
SOURCE
ORGANISM
Unknown.
Unclassified.

REFERENCE 1 (bases 1 to 22)
AUTHORS Zerlauch, G., Gessner, M., Koeltzitz, K. and Gross, P.
TITLE Method for producing a quality assured biological sample and
composition containing the same
JOURNAL Patent: US 6649339-A 1 18-NOV-2003;
location/Qualifiers
1..22
/organism="Unknown"
/mol_type="genomic DNA"

Query Match 0.4%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 36;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2589 GACGATTATCGACACCCCA 2610
DB 1 GACGATTATCGACACCCCA 22

```
RESULT 52
AX003444      AX003444      22 bp      DNA      linear      PAT 07-SEP-2000
LOCUS         Sequence 24 from Patent WO928439.
DEFINITION    AX003444
ACCESSION     AX003444
VERSION       AX003444.1 GI:99272248
KEYWORDS
SOURCE
ORGANISM      B19 virus
              B19 virus
              Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE
1 Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
AUTHORS
TITLE
JOURNAL
FEATURES
source
1..22
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
Best Local Similarity 100.0%; Score 22; DB 1; Length 22;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2814 TGCTAAGTTGGGATTAATCC 2835
Db 1 TGCTAAGTTGGGATTAATCC 22

RESULT 53
AX003484      AX003484      22 bp      DNA      linear      PAT 07-SEP-2000
LOCUS         Sequence 64 from Patent WO928439.
DEFINITION    AX003484
ACCESSION     AX003484
VERSION       AX003484.1 GI:9927337
KEYWORDS
SOURCE
ORGANISM      B19 virus
              B19 virus
              Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE
1 Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
AUTHORS
TITLE
JOURNAL
FEATURES
source
1..22
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
Best Local Similarity 100.0%; Score 22; DB 1; Length 22;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2552 TCTCAGACCTATATAGTCATC 2573
Db 1 TCTCAGACCTATATAGTCATC 22

RESULT 54
AX088167      AX088167      22 bp      DNA      linear      PAT 17-MAR-2001
LOCUS         Sequence 1 from Patent WO0114593.
DEFINITION    AX088167
ACCESSION     AX088167
VERSION       AX088167.1 GI:13397080
KEYWORDS
SOURCE
ORGANISM      synthetic construct
              synthetic construct
```

```
artificial sequences.
REFERENCE
1 Zierlauch,G., Gessner,M., Koettwitz,K. and Gross,P.
  A method for producing quality assured biological sample and
  composition containing the same
  Patent: WO 0114593-A 1 01-MAR-2001;
  Baxter Aktiengesellschaft (AT)
FEATURES
source
1..22
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/Note="PCR primer"

Query Match
Best Local Similarity 100.0%; Score 22; DB 1; Length 22;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2589 GACAGTTATCTGACGACCCCA 2610
Db 1 GACAGTTATCTGACGACCCCA 22

RESULT 55
BD087060      BD087060      22 bp      DNA      linear      PAT 27-AUG-2002
LOCUS         Erythrovirus and application thereof.
DEFINITION    BD087060
ACCESSION     BD087060
VERSION       BD087060.1 GI:22632670
KEYWORDS
SOURCE
ORGANISM      Erythrovirus
              Erythrovirus
              Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE
1 (bases 1 to 22)
  Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
  Erythrovirus and application thereof
  Patent: JP 2001525163-A 24 11-DEC-2001;
  ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT
OS Erythrovirus
PN JP 2001525163-A/24
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C1201/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key
FT source
1..22
Location/Qualifiers
source
1..22
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match
Best Local Similarity 100.0%; Score 22; DB 1; Length 22;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2814 TGCTAAGTTGGGATTAATCC 2835
Db 1 TGCTAAGTTGGGATTAATCC 22

RESULT 56
BD087100      BD087100      22 bp      DNA      linear      PAT 27-AUG-2002
LOCUS         Erythrovirus and application thereof.
DEFINITION    BD087100
ACCESSION     BD087100
VERSION       BD087100.1 GI:22632710
KEYWORDS
SOURCE
ORGANISM      JP 2001525163-A/64.
```

SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT

Erythrovirus
Erythrovirus
Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
1 (bases 1 to 22)
Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
Erythrovirus and its applications
Patent: JP 2001525163-A 64 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
JP 2001525163-A/64
PD 11-DEC-2001
PR 03-DEC-1998 JP 2000523317
PI 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/66, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key
FT source
FT Location/Qualifiers
1..22
/organism="Erythrovirus".
Location/Qualifiers
1..22
/organism="Erythrovirus".
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.4%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 36;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2552 TCTCCAGACCTATATAGTCATC 2573
DB 1 TCTCCAGACCTATATAGTCATC 22

RESULT 57
LOCUS AR371201 23 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 6 from patent US 6395472.
ACCESSION AR371201
VERSION AR371201.1 GI:34608131
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE Unclassified.
1 (bases 1 to 23)
AUTHORS Leary,T.P., Erker,J., Chalmers,M., Simons,J., Birkenmeyer,L.,
Muerhoff,S., Pilot-Matias,T., Desai,S. and Mushawar,I.,
TITLE Methods of utilizing the TR virus
JOURNAL Patent: US 6395472-A 6 28-MAY-2002;
FEATURES Location/Qualifiers
1..23
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.4%; Score 21.4; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 42;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3015 GCATGACTTCAGTTAATCTGCA 3037
DB 1 GCATGACTTCAGTTAATCTGCA 23

RESULT 58
LOCUS AX003427 21 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 7 from Patent WO928439.
ACCESSION AX003427
VERSION AX003427.1 GI:9927231
KEYWORDS
SOURCE B19 virus

ORGANISM B19 virus
REFERENCE Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 7 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES Location/Qualifiers
1..21
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1723 TGCTGTATGCAAGCTGG 1743
DB 1 TGCTGTATGCAAGCTGG 21

RESULT 59
LOCUS AX003456 21 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 36 from Patent WO9928439.
ACCESSION AX003456
VERSION AX003456.1 GI:9927260
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 36 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES Location/Qualifiers
1..21
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4376 CCTCAATATTTTAAATA 4396
DB 1 CCTCAATATTTTAAATA 21

RESULT 60
LOCUS AX003462 21 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 42 from Patent WO9928439.
ACCESSION AX003462
VERSION AX003462.1 GI:9927266
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 42 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES Location/Qualifiers
1..21
/organism="B19 virus"


```
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
  0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4686 TCCCGACCGGTCTCAGCCA 4706
DB 1 TCCCGACCGGTCTCAGCCA 21

RESULT 61
LOCUS AX003526/c 21 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 106 from Patent WO928439.
ACCESSION AX003526
VERSION AX003526.1 GI:9927362
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
VIRUSES; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE
1 Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
AUTHORS Erythrovirus and its applications
TITLE Patent: WO 928439-A 106 10-JUN-1999;
JOURNAL ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
LOCATION/Qualifiers
1. .21
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

FEATURES
source

Query Match
  0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2041 TTTTACACGCGCTTGCCGAT 2061
DB 21 TTTTACACGCGCTTGCCGAT 1
```

```
RESULT 63
LOCUS AX003535 21 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 115 from Patent WO928439.
ACCESSION AX003535
VERSION AX003535.1 GI:9927371
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
VIRUSES; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE
1 Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
AUTHORS Erythrovirus and its applications
TITLE Patent: WO 928439-A 115 10-JUN-1999;
JOURNAL ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
LOCATION/Qualifiers
1. .21
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

FEATURES
source

Query Match
  0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1755 AAATGGGCAATTAACCTACAC 1775
DB 1 AAATGGGCAATTAACCTACAC 21

RESULT 64
LOCUS BD087043 21 bp DNA linear PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087043
VERSION BD087043.1 GI:22632653
KEYWORDS JP 2001525163-A/7.
SOURCE Erythrovirus
ORGANISM Erythrovirus
VIRUSES; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE
1 (bases 1 to 21)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 7 11-DEC-2001;
COMMENT ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/7
PD 11-DEC-2001 JP 2000523317
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68,PC
G01N33/53
PC C12N15/00
CC Erythrovirus and application thereof
FH Key
FT source
FT Location/Qualifiers
1. .21
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

FEATURES
source

Query Match
  0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1723 TGGTGTATGCAACAAGCTGG 1743
DB 1 TGGTGTATGCAACAAGCTGG 21
```

```

RESULT 65
LOCUS      BD087072
DEFINITION Erythrovirus and application thereof.
ACCESSION  BD087072
VERSION     BD087072.1 GI:22632682
KEYWORDS    JP 2001525163-A/36.
SOURCE      Erythrovirus
ORGANISM    Erythrovirus
REFERENCE   1 (bases 1 to 21)
AUTHORS     Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE       Erythrovirus and application thereof
JOURNAL     Patent: JP 2001525163-A 36 11-DEC-2001;
            ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT     OS Erythrovirus
            PN JP 2001525163-A/36
            PD 11-DEC-2001
            PE 03-DEC-1998 JP 2000523317
            PF 03-DEC-1997 FR 97/15197
            PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
            C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
            G01N33/53,
            CC Erythrovirus and application thereof
            FH Key
            FT source
            Location/Qualifiers
            1..21
            /organism="Erythrovirus"
            /mol_type="genomic DNA"
            /db_xref="taxon:40121"

Query Match      0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      4376 CCTCAATATTTTAAATA 4396
Db      1 CCTCAATATTTTAAATA 21

RESULT 66
LOCUS      BD087078
DEFINITION Erythrovirus and application thereof.
ACCESSION  BD087078
VERSION     BD087078.1 GI:22632688
KEYWORDS    JP 2001525163-A/42.
SOURCE      Erythrovirus
ORGANISM    Erythrovirus
REFERENCE   1 (bases 1 to 21)
AUTHORS     Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE       Erythrovirus and application thereof
JOURNAL     Patent: JP 2001525163-A 42 11-DEC-2001;
            ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT     OS Erythrovirus
            PN JP 2001525163-A/42
            PD 11-DEC-2001
            PE 03-DEC-1998 JP 2000523317
            PF 03-DEC-1997 FR 97/15197
            PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
            C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
            G01N33/53,
            CC Erythrovirus and application thereof
            FH Key
            FT source
            Location/Qualifiers
            1..21
            /organism="Erythrovirus"
            /mol_type="genomic DNA"
            /db_xref="taxon:40121"

Query Match      0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      4376 CCTCAATATTTTAAATA 4396
Db      1 CCTCAATATTTTAAATA 21

```

```

FEATURES
source      Location/Qualifiers
            1..21
            /organism="Erythrovirus"
            /mol_type="genomic DNA"
            /db_xref="taxon:40121"

Query Match      0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      4686 TCCCAACCGTGCTCAGCCA 4706
Db      1 TCCCAACCGTGCTCAGCCA 21

RESULT 67
LOCUS      BD087125/c
DEFINITION Erythrovirus and application thereof.
ACCESSION  BD087125
VERSION     BD087125.1 GI:22632735
KEYWORDS    JP 2001525163-A/89.
SOURCE      Erythrovirus
ORGANISM    Erythrovirus
REFERENCE   1 (bases 1 to 21)
AUTHORS     Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE       Erythrovirus and application thereof
JOURNAL     Patent: JP 2001525163-A 89 11-DEC-2001;
            ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT     OS Erythrovirus
            PN JP 2001525163-A/89
            PD 11-DEC-2001
            PE 03-DEC-1998 JP 2000523317
            PF 03-DEC-1997 FR 97/15197
            PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
            C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
            G01N33/53,
            CC Erythrovirus and application thereof
            FH Key
            FT source
            Location/Qualifiers
            1..21
            /organism="Erythrovirus"
            /mol_type="genomic DNA"
            /db_xref="taxon:40121"

Query Match      0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1879 GAAGAAGTCAGTGAAGCAGC 1899
Db      21 GAAGAAGTCAGTGAAGCAGC 1

RESULT 68
LOCUS      BD087129/c
DEFINITION Erythrovirus and application thereof.
ACCESSION  BD087129
VERSION     BD087129.1 GI:22632739
KEYWORDS    JP 2001525163-A/93.
SOURCE      Erythrovirus
ORGANISM    Erythrovirus
REFERENCE   1 (bases 1 to 21)
AUTHORS     Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE       Erythrovirus and application thereof
JOURNAL     Patent: JP 2001525163-A 93 11-DEC-2001;
            ASSISTANCE PUBLIQUE HOPITAUX DE PARIS

```

COMMENT OS Erythrovirus
PN JP 2001525163-A/93
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
P1 QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..21
/organism='Erythrovirus',
location/Qualifiers
1..21
/organism='Erythrovirus'
/mol_type='genomic DNA'
/db_xref='taxon:40121'

Query Match 0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2041 TTTTACAGCCGCTTGCCTGAT 2061
DB 21 TTTTACAGCCGCTTGCCTGAT 1

RESULT 69
BD087134 21 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
DEFINITION BD087134
ACCESSION BD087134.1 GI:22632744
VERSION JP 2001525163-A/98.
KEYWORDS Erythrovirus
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1 (bases 1 to 21)
AUTHORS Nguyen, Q.T., Garbarg, C.A. and Auguste, V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 98 11-DEC-2001;
COMMENT ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/98
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
P1 QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..21
/organism='Erythrovirus',
location/Qualifiers
1..21
/organism='Erythrovirus'
/mol_type='genomic DNA'
/db_xref='taxon:40121'

Query Match 0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1755 AAATGGGCAATAACTACAC 1775
DB 1 AAATGGGCAATAACTACAC 21

RESULT 70
AR371205/c

LOCUS AR371205 20 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 10 from patent US 6395472.
ACCESSION AR371205
VERSION AR371205.1 GI:34608135
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Leary, T.P., Erker, J., Chalmers, M., Simons, J., Birkenmeyer, L.,
Muerhoff, S., Pilot-Matias, T., Desai, S. and Mushahwar, I.,
TITLE Methods of utilizing the TT virus
JOURNAL Patent: US 6395472-A 10 28-MAY-2002;
FEATURES
source 1..20
/organism='unknown'
/mol_type='genomic DNA'

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1992 CGGAGCCGAGTTCTCTCCG 2011
DB 20 CGGAGCCGAGTTCTCTCCG 1

RESULT 71
AR430270/c
LOCUS AR430270 20 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 2 from patent US 6649339.
ACCESSION AR430270
VERSION AR430270.1 GI:40191039
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Zerlaut, G., Gessner, M., Koettwitz, K. and Gross, P.
TITLE Method for producing a quality assured biological sample and
JOURNAL composition containing the same
P1 Patent: US 6649339-A 2 18-NOV-2003;
COMMENT Location/Qualifiers
1..20
/organism='unknown'
/mol_type='genomic DNA'

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2682 ACNAGCCTGGGCAAGTTAGC 2701
DB 20 ACNAGCCTGGGCAAGTTAGC 1

RESULT 72
AX003425 20 bp DNA linear PAT 07-SEP-2000
LOCUS AX003425
DEFINITION Sequence 5 from Patent WO9928439.
ACCESSION AX003425
VERSION AX003425.1 GI:9927229
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE 1
AUTHORS Auguste, V., Garbarg-Chenon, A. and Nguyen, Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 5 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
COMMENT Location/Qualifiers

```
source
1. .20
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
Best Local Similarity 0.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1429 TTGGTGTCTGGATGAGG 1448
|||||
1 TTGGTGTCTGGATGAGG 20

Db

RESULT 73
AX003426 20 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 6 from Patent WO928439.
DEFINITION AX003426
ACCESSION AX003426
VERSION AX003426.1 GI:9927230
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
TITLE Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
JOURNAL Erythrovirus and its applications
PATENT: WO 928439-A 6 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
location/Qualifiers
1. .20
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
Best Local Similarity 0.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1693 ACAGAGGCTGATGTACACA 1712
|||||
1 ACAGAGGCTGATGTACACA 20

Db

RESULT 74
AX003434 20 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 14 from Patent WO928439.
DEFINITION AX003434
ACCESSION AX003434
VERSION AX003434.1 GI:9927238
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
TITLE Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
JOURNAL Erythrovirus and its applications
PATENT: WO 928439-A 14 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
location/Qualifiers
1. .20
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
Best Local Similarity 0.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2062 CAGTTTCTGAAGTCTTACT 2081
|||||
1 CAGTTTCTGAAGTCTTACT 2081
```

```
Db 1 CAGTTTCTGAAGTCTTACT 20

RESULT 75
AX003451 20 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 31 from Patent WO928439.
DEFINITION AX003451
ACCESSION AX003451
VERSION AX003451.1 GI:9927255
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
TITLE Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
JOURNAL Erythrovirus and its applications
PATENT: WO 928439-A 31 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
location/Qualifiers
1. .20
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
Best Local Similarity 0.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4055 ACAGGATTAATGCCATTTC 4074
|||||
1 ACAGGATTAATGCCATTTC 20

Db

RESULT 76
AX003527 20 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 107 from Patent WO928439.
DEFINITION AX003527
ACCESSION AX003527
VERSION AX003527.1 GI:9927363
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
TITLE Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
JOURNAL Erythrovirus and its applications
PATENT: WO 928439-A 107 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
location/Qualifiers
1. .20
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
Best Local Similarity 0.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1968 GACCACTTCAGAGATCAT 1987
|||||
1 GACCACTTCAGAGATCAT 1987

Db

RESULT 77
AX003529/c 20 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 109 from Patent WO928439.
DEFINITION AX003529
ACCESSION AX003529
VERSION AX003529.1 GI:9927365
KEYWORDS
SOURCE B19 virus
```

ORGANISM B19 virus
viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 109 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source 1..20
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2298 ATGTGCTTACTGCTGAT 2317
20 ATGTGCTTACTGCTGAT 1

RESULT 78
LOCUS AX003532/c 20 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 112 from Patent WO9928439.
ACCESSION AX003532
VERSION AX003532.1 GI:9927368
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 112 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source 1..20
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2793 ATGACTTTAGGTATAGCAA 2812
20 ATGACTTTAGGTATAGCAA 1

RESULT 79
LOCUS AX003536/c 20 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 116 from Patent WO9928439.
ACCESSION AX003536
VERSION AX003536.1 GI:9927372
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 116 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
source 1..20
/organism="B19 virus"
Location/Qualifiers

/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2845 TTGACGCTAGCAGATGAAG 2864
20 TTGACGCTAGCAGATGAAG 1

RESULT 80
LOCUS AX088168/c 20 bp DNA linear PAT 17-MAR-2001
DEFINITION Sequence 2 from Patent WO0114593.
ACCESSION AX088168
VERSION AX088168.1 GI:13397081
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.

REFERENCE 1
AUTHORS Zerklauth,G., Gessner,M., Koettnitz,K. and Gross,P.
TITLE A method for producing quality assured biological sample and
JOURNAL composition containing the same
Patent: WO 0114593-A 2 01-MAR-2001;
Baxter Aktiengesellschaft (AT)

FEATURES
source 1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="PCR primer"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2682 ACAAGCCTGGCGCAAGTTAGC 2701
20 ACAAGCCTGGCGCAAGTTAGC 1

RESULT 81
LOCUS BD087041 20 bp DNA linear PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087041
VERSION BD087041.1 GI:22632651
KEYWORDS JP 2001525163-A/5.
SOURCE Erythrovirus
ORGANISM Erythrovirus
viruses; ssDNA viruses; Parvoviridae; Parvovirinae.

REFERENCE 1 (bases 1 to 20)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof.
JOURNAL Patent: JP 2001525163-A 5 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS

COMMENT OS Erythrovirus
PN JP 2001525163-A/5
PD 11-DEC-2001
PP 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68,PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH key Location/Qualifiers
FT source 1..20
/organism="Erythrovirus".
Location/Qualifiers

source 1..20
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1429 TTGGTGGCTGGGATGAAGG 1448
Db 1 TTGGTGGCTGGGATGAAGG 20

RESULT 82
BD087042
LOCUS Erythrovirus and application thereof. 20 bp DNA linear PAT 27-AUG-2002
DEFINITION
ACCESSION BD087042
VERSION BD087042.1 GI:22632652
KEYWORDS JP 2001525163-A/6.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1 (bases 1 to 20)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 6 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/6
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE, GARBARG, VERNIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC.
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..20
/organism="Erythrovirus".
Location/Qualifiers

FEATURES
source 1..20
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1693 ACAGAGCTGATGATACACA 1712
Db 1 ACAGAGCTGATGATACACA 20

RESULT 83
BD087050
LOCUS Erythrovirus and application thereof. 20 bp DNA linear PAT 27-AUG-2002
DEFINITION
ACCESSION BD087050
VERSION BD087050.1 GI:22632660
KEYWORDS JP 2001525163-A/14.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1 (bases 1 to 20)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 14 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus

PN JP 2001525163-A/14
PD 11-DEC-2001
PR 03-DEC-1998 JP 2000523317
PI QUANG TRI NGUYEN, CHENON ANTOINE, GARBARG, VERNIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC.
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..20
/organism="Erythrovirus".
Location/Qualifiers

FEATURES
source 1..20
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4055 ACAGAGTAATGCCATTTC 4074
Db 1 ACAGAGTAATGCCATTTC 20

RESULT 85
BD087126
LOCUS Erythrovirus and application thereof. 20 bp DNA linear PAT 27-AUG-2002

PN JP 2001525163-A/31
PD 11-DEC-2001
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE, GARBARG, VERNIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC.
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..20
/organism="Erythrovirus".
Location/Qualifiers

FEATURES
source 1..20
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2062 CAGTTTCGTGAAGCTGTAGT 2081
Db 1 CAGTTTCGTGAAGCTGTAGT 20

RESULT 84
BD087067
LOCUS Erythrovirus and application thereof. 20 bp DNA linear PAT 27-AUG-2002
DEFINITION
ACCESSION BD087067
VERSION BD087067.1 GI:22632677
KEYWORDS JP 2001525163-A/31.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1 (bases 1 to 20)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 31 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/31
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE, GARBARG, VERNIQUE AUGUSTE PC
C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC.
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..20
/organism="Erythrovirus".
Location/Qualifiers

DEFINITION Erythrovirus and application thereof.
ACCESSION BD087126
VERSION BD087126.1 GI:22632736
KEYWORDS JP 2001525163-A/90.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1 (bases 1 to 20)
AUTHORS Nguyen,O.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 90 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/90
PD 11-DEC-2001 JP 2000523317
PF 03-DEC-1998 JP 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C1201/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..20
FEATURES
source Location/Qualifiers
1..20
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1968 GACCACTTCAGAGAAATCAT 1987
Db 1 GACCACTTCAGAGAAATCAT 20
|||||

RESULT 86
LOCUS BD087128/c 20 bp DNA linear PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087128
VERSION BD087128.1 GI:22632738
KEYWORDS JP 2001525163-A/92.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1 (bases 1 to 20)
AUTHORS Nguyen,O.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 92 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/92
PD 11-DEC-2001 JP 2000523317
PF 03-DEC-1998 JP 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C1201/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..20
FEATURES
source Location/Qualifiers
1..20
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2298 ATGTGCTTACCTGTCTGAT 2317
Db 20 ATGTGCTTACCTGTCTGAT 1
|||||

RESULT 87
LOCUS BD087131/c 20 bp DNA linear PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087131
VERSION BD087131.1 GI:22632741
KEYWORDS JP 2001525163-A/95.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1 (bases 1 to 20)
AUTHORS Nguyen,O.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 95 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/95
PD 11-DEC-2001 JP 2000523317
PF 03-DEC-1998 JP 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C1201/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..20
FEATURES
source Location/Qualifiers
1..20
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2793 ATGACTTAGGTATGCCAA 2812
Db 20 ATGACTTAGGTATGCCAA 1
|||||

RESULT 88
LOCUS BD087135/c 20 bp DNA linear PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087135
VERSION BD087135.1 GI:22632745
KEYWORDS JP 2001525163-A/99.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1 (bases 1 to 20)
AUTHORS Nguyen,O.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 99 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PN JP 2001525163-A/99
PD 11-DEC-2001 JP 2000523317
PF 03-DEC-1997 JP 97/15197

PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
 C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12Q1/68, PC
 G01N33/53, PC
 C12N15/00
 CC Erythrovirus and application thereof
 FH Key Location/Qualifiers
 FT source 1..20
 /organism='Erythrovirus'
 Location/Qualifiers
 1..20
 /organism='Erythrovirus'
 /mol_type='genomic DNA'
 /db_xref='taxon:40121'

FEATURES

source

Query Match 0.4%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 46;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2845 TTGACGCGTAGCAGATGAAG 2864
 |||||
 20 TTGACGCGTAGCAGATGAAG 1

Db

RESULT 89
 AX003438 19 bp DNA linear PAT 07-SEP-2000
 LOCUS
 DEFINITION Sequence 18 from Patent WO928439.
 ACCESSION AX003438
 VERSION AX003438.1 GI:9927242
 KEYWORDS
 SOURCE B19 virus
 ORGANISM B19 virus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE
 AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
 TITLE Erythrovirus and its applications
 JOURNAL Patent: WO 928439-A 18 10-JUN-1999;
 ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
 CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
 source Location/Qualifiers
 1..19
 /organism='B19 virus'
 /mol_type='unassigned DNA'
 /db_xref='taxon:10798'

Query Match 0.4%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2562 TATATAGTCATCATTTTCA 2580
 |||||
 1 TATATAGTCATCATTTTCA 19

Db

RESULT 90
 AX003440 19 bp DNA linear PAT 07-SEP-2000
 LOCUS
 DEFINITION Sequence 20 from Patent WO928439.
 ACCESSION AX003440
 VERSION AX003440.1 GI:9927244
 KEYWORDS
 SOURCE B19 virus
 ORGANISM B19 virus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE
 AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
 TITLE Erythrovirus and its applications
 JOURNAL Patent: WO 928439-A 20 10-JUN-1999;
 ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
 CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES

source

1..19
 /organism='B19 virus'

/mol_type='unassigned DNA'
 /db_xref='taxon:10798'

Query Match 0.4%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2635 TGCAGAACTAGAGAGAA 2653
 |||||
 1 TGCAGAACTAGAGAGAA 19

Db

RESULT 91
 AX003525 19 bp DNA linear PAT 07-SEP-2000
 LOCUS
 DEFINITION Sequence 105 from Patent WO928439.
 ACCESSION AX003525
 VERSION AX003525.1 GI:9927361
 KEYWORDS
 SOURCE B19 virus
 ORGANISM B19 virus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE
 AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
 TITLE Erythrovirus and its applications
 JOURNAL Patent: WO 928439-A 105 10-JUN-1999;
 ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
 CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
 source Location/Qualifiers
 1..19
 /organism='B19 virus'
 /mol_type='unassigned DNA'
 /db_xref='taxon:10798'

Query Match 0.4%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1797 TGCAGATGCCCTCCACCCA 1815
 |||||
 1 TGCAGATGCCCTCCACCCA 19

Db

RESULT 92
 AX003528 19 bp DNA linear PAT 07-SEP-2000
 LOCUS
 DEFINITION Sequence 108 from Patent WO928439.
 ACCESSION AX003528
 VERSION AX003528.1 GI:9927364
 KEYWORDS
 SOURCE B19 virus
 ORGANISM B19 virus
 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE
 AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
 TITLE Erythrovirus and its applications
 JOURNAL Patent: WO 928439-A 108 10-JUN-1999;
 ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
 CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)

FEATURES
 source Location/Qualifiers
 1..19
 /organism='B19 virus'
 /mol_type='unassigned DNA'
 /db_xref='taxon:10798'

Query Match 0.4%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2043 TTACAGCGCGCTTGGCGAT 2061
 |||||
 19 TTACAGCGCGCTTGGCGAT 1

Db

RESULT 93
AX003531 19 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 111 from Patent WO928439.
DEFINITION AX003531
ACCESSION AX003531.1 GI:9227367
VERSION
KEYWORDS
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 111 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
Location/Qualifiers
1. .19
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"
FEATURES
source

Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1747 CACTATGAAACTGGGCAA 1765
DB 1 CACTATGAAACTGGGCAA 19

RESULT 94
AX003533 19 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 113 from Patent WO928439.
DEFINITION AX003533
ACCESSION AX003533
VERSION AX003533.1 GI:9227369
KEYWORDS
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 113 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
Location/Qualifiers
1. .19
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"
FEATURES
source

Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2609 CATGCTTATCATCCAGTA 2627
DB 1 CATGCTTATCATCCAGTA 19

RESULT 95
AX003534 19 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 114 from Patent WO928439.
DEFINITION AX003534
ACCESSION AX003534
VERSION AX003534.1 GI:9227370
KEYWORDS
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 114 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
Location/Qualifiers
1. .19
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"
FEATURES
source

Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2852 GTAGCAGATGAGAAATTGT 2870
DB 1 GTAGCAGATGAGAAATTGT 1

RESULT 96
BD087054 19 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
DEFINITION BD087054
ACCESSION BD087054
VERSION BD087054.1 GI:22632664
KEYWORDS JP 2001525163-A/18.
SOURCE Erythrovirus
ORGANISM Erythrovirus
Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 19)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 18 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/18
PD 11-DEC-2001
PP 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
CI:2N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key location/Qualifiers
FT source 1. .19
/organism="Erythrovirus".
FEATURES
source
1. .19
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2562 TATATGTCATCATTTTCA 2580
DB 1 TATATGTCATCATTTTCA 19

RESULT 97
BD087056 19 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
DEFINITION BD087056
ACCESSION BD087056
VERSION BD087056.1 GI:22632666
KEYWORDS JP 2001525163-A/20.
SOURCE Erythrovirus
ORGANISM Erythrovirus

```

REFERENCE
  1 (bases 1 to 19)
  Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
AUTHORS
  Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE
  Erythrovirus and application thereof
JOURNAL
  Patent: JP 2001525163-A 20 11-DEC-2001;
  ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT
  OS Erythrovirus
  PN JP 2001525163-A/20
  PD 11-DEC-2001
  PF 03-DEC-1998 JP 2000523317
  PR 03-DEC-1997 FR 97/15197
  PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
  C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
  G01N33/53,
  PC C12N15/00
  CC Erythrovirus and application thereof
  FH Key Location/Qualifiers
  FT source 1..19
  FT Location/Qualifiers
  FT source 1..19
  /organism='Erythrovirus'.
  /organism="Erythrovirus"
  /mol_type="genomic DNA"
  /db_xref="taxon:40121"

FEATURES
  source
    1..19
    Location/Qualifiers
      1..19
      /organism="Erythrovirus"
      /mol_type="genomic DNA"
      /db_xref="taxon:40121"

Query Match
  Best Local Similarity 100.0%; Score 19; DB 1; Length 19;
  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2635 TGCAAGACCTGAGGAGAA 2653
Db 1 TGCAAGACCTGAGGAGAA 19

RESULT 98
LOCUS BD087124 19 bp DNA linear PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087124.1 GI:22632734
KEYWORDS JP 2001525163-A/88.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE
  1 (bases 1 to 19)
  Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
AUTHORS
  Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE
  Erythrovirus and application thereof
JOURNAL
  Patent: JP 2001525163-A 88 11-DEC-2001;
  ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT
  OS Erythrovirus
  PN JP 2001525163-A/88
  PD 11-DEC-2001
  PF 03-DEC-1998 JP 2000523317
  PR 03-DEC-1997 FR 97/15197
  PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
  C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
  G01N33/53,
  PC C12N15/00
  CC Erythrovirus and application thereof
  FH Key Location/Qualifiers
  FT source 1..19
  FT Location/Qualifiers
  FT source 1..19
  /organism='Erythrovirus'.
  /organism="Erythrovirus"
  /mol_type="genomic DNA"
  /db_xref="taxon:40121"

FEATURES
  source
    1..19
    Location/Qualifiers
      1..19
      /organism="Erythrovirus"
      /mol_type="genomic DNA"
      /db_xref="taxon:40121"

Query Match
  Best Local Similarity 100.0%; Score 19; DB 1; Length 19;
  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1797 TGCAATGCGCTCCACCA 1815

```

```

Db 1 TGCAATGCGCTCCACCA 19

RESULT 99
LOCUS BD087127 19 bp DNA linear PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087127
KEYWORDS BD087127.1 GI:22632737
  JP 2001525163-A/91.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE
  1 (bases 1 to 19)
  Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
AUTHORS
  Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE
  Erythrovirus and application thereof
JOURNAL
  Patent: JP 2001525163-A 91 11-DEC-2001;
  ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT
  OS Erythrovirus
  PN JP 2001525163-A/91
  PD 11-DEC-2001
  PF 03-DEC-1998 JP 2000523317
  PR 03-DEC-1997 FR 97/15197
  PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
  C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
  G01N33/53,
  PC C12N15/00
  CC Erythrovirus and application thereof
  FH Key Location/Qualifiers
  FT source 1..19
  FT Location/Qualifiers
  FT source 1..19
  /organism='Erythrovirus'.
  /organism="Erythrovirus"
  /mol_type="genomic DNA"
  /db_xref="taxon:40121"

FEATURES
  source
    1..19
    Location/Qualifiers
      1..19
      /organism="Erythrovirus"
      /mol_type="genomic DNA"
      /db_xref="taxon:40121"

Query Match
  Best Local Similarity 100.0%; Score 19; DB 1; Length 19;
  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2043 TTACAGCGCGCTTGCGCAT 2061
Db 19 TTACAGCGCGCTTGCGCAT 1

RESULT 100
LOCUS BD087130 19 bp DNA linear PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087130
KEYWORDS BD087130.1 GI:22632740
  JP 2001525163-A/94.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE
  1 (bases 1 to 19)
  Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
AUTHORS
  Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE
  Erythrovirus and application thereof
JOURNAL
  Patent: JP 2001525163-A 94 11-DEC-2001;
  ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT
  OS Erythrovirus
  PN JP 2001525163-A/94
  PD 11-DEC-2001
  PF 03-DEC-1998 JP 2000523317
  PR 03-DEC-1997 FR 97/15197
  PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
  C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
  G01N33/53,
  PC C12N15/00
  CC Erythrovirus and application thereof
  FH Key Location/Qualifiers
  FT source 1..19
  FT Location/Qualifiers
  FT source 1..19
  /organism='Erythrovirus'.
  /organism="Erythrovirus"
  /mol_type="genomic DNA"
  /db_xref="taxon:40121"

FEATURES
  source
    1..19
    Location/Qualifiers
      1..19
      /organism="Erythrovirus"
      /mol_type="genomic DNA"
      /db_xref="taxon:40121"

Query Match
  Best Local Similarity 100.0%; Score 19; DB 1; Length 19;
  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 19 TTACAGCGCGCTTGCGCAT 1

```

FT source 1..19
 /organism='Erythrovirus'.
 FEATURES
 FT Location/Qualifiers
 1..19
 /organism='Erythrovirus'
 /mol_type='genomic DNA'
 /db_xref='taxon:40121'

Query Match 0.4%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2609 CATGCTTATCATCGAGTA 2627
 DB 1 CATGCTTATCATCGAGTA 19

RESULT 101
 LOCUS BD087132 19 bp DNA linear PAT 27-AUG-2002
 DEFINITION Erythrovirus and application thereof.
 ACCESSION BD087132
 VERSION BD087132.1 GI:22632742
 KEYWORDS JP 2001525163-A/96.
 SOURCE Erythrovirus
 ORGANISM Erythrovirus
 REFERENCES
 1 (bases 1 to 19)
 Nguyen, Q.T., Garbarg, C.A. and Auguste, V.
 Erythrovirus and application thereof
 Patent: JP 2001525163-A 96 11-DEC-2001;
 ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
 OS Erythrovirus
 FN JP 2001525163-A/96
 PD 11-DEC-2001
 PE 03-DEC-1998 JP 2000523317
 PR 03-DEC-1997 FR 97/15197
 PI QUANG TRI NGUYEN, CHENON ANTOINE, GARBARG, VERNIQUE AUGUSTE, PC
 C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12O1/68, PC
 G01N33/53,
 CC Erythrovirus and application thereof
 FH Key Location/Qualifiers
 FT source 1..19
 FEATURES
 FT Location/Qualifiers
 1..19
 /organism='Erythrovirus'.
 /organism='Erythrovirus'
 /mol_type='genomic DNA'
 /db_xref='taxon:40121'

Query Match 0.4%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1747 CACTATGAAGACGCGCA 1765
 DB 1 CACTATGAAGACGCGCA 19

RESULT 102
 LOCUS BD087133 19 bp DNA linear PAT 27-AUG-2002
 DEFINITION Erythrovirus and application thereof.
 ACCESSION BD087133
 VERSION BD087133.1 GI:22632743
 KEYWORDS JP 2001525163-A/97.
 SOURCE Erythrovirus
 ORGANISM Erythrovirus
 REFERENCES
 1 (bases 1 to 19)
 Nguyen, Q.T., Garbarg, C.A. and Auguste, V.
 Erythrovirus and application thereof

JOURNAL Patent: JP 2001525163-A 97 11-DEC-2001;
 ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
 OS Erythrovirus
 FN JP 2001525163-A/97
 PD 11-DEC-2001
 PE 03-DEC-1998 JP 2000523317
 PR 03-DEC-1997 FR 97/15197
 PI QUANG TRI NGUYEN, CHENON ANTOINE, GARBARG, VERNIQUE AUGUSTE, PC
 C12N15/09, A61K39/12, A61K48/00, C07K14/015, C07K16/08, C12O1/68, PC
 G01N33/53,
 CC Erythrovirus and application thereof
 FH Key Location/Qualifiers
 FT source 1..19
 FEATURES
 FT Location/Qualifiers
 1..19
 /organism='Erythrovirus'.
 /organism='Erythrovirus'
 /mol_type='genomic DNA'
 /db_xref='taxon:40121'

Query Match 0.4%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 53;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2852 GTAGCAGATGAGGATGT 2870
 DB 19 GTAGCAGATGAGGATGT 1

RESULT 103
 LOCUS AR428702 20 bp DNA linear PAT 18-DEC-2003
 DEFINITION Sequence 2 from patent US 6642033.
 ACCESSION AR428702
 VERSION AR428702.1 GI:40188432
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCES
 1 (bases 1 to 20)
 Lazo, A., Zhao, X., Tassello, J.A. and Gibaja, V.
 Nucleic acids for detecting parvovirus and methods of using same
 Patent: US 6642033-A 2 04-NOV-2003;
 JOURNAL Location/Qualifiers
 FT source 1..20
 FEATURES
 FT Location/Qualifiers
 1..20
 /organism='unknown'
 /mol_type='genomic DNA'

Query Match 0.4%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 63;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 414 AGACTCTGACTGCGAAC 433
 DB 20 AGACTCTGACTGCGAAC 1

RESULT 104
 LOCUS AX080219 20 bp DNA linear PAT 22-FEB-2001
 DEFINITION Sequence 2 from Patent WO0106019.
 ACCESSION AX080219
 VERSION AX080219.1 GI:13159699
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 REFERENCES
 1
 Lazo, A., Zhao, J.X., Tassello, J.A. and Gibaja, V.
 Nucleic acids for detecting parvovirus and methods of using same
 Patent: WO 0106019-A 2 25-JAN-2001;
 V.I. Technologies, Inc. (US)

FEATURES
source
Location/Qualifiers
1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="VINS-3R PRIMER"

Query Match 0.4%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 63;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 414 AGATCTCTGCTGGGAC 433
DB 20 AGACACTTCTGCTGGGAC 1

RESULT 105
LOCUS BD090940 20 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for quantifying DNA binding activity of DNA binding proteins.
ACCESSION BD090940
VERSION BD090940.1 GI:22636550
KEYWORDS JP 2001321199-A/5.
SOURCE synthetic construct
ORGANISM synthetic construct
artificial sequences.
1 (bases 1 to 20)
REFERENCE 1 Martin M.F.K. and Liu Y.
AUTHORS Martin M.F.K. and Liu Y.
TITLE Method for quantifying DNA binding activity of DNA binding proteins
JOURNAL Patent: JP 2001321199-A 5 20-NOV-2001;
HEALTH RESEARCH INC
OS Artificial Sequence
PN JP 2001321199-A/5
PD 20-NOV-2001
PF 02-APR-2001 JP 2001103067
PI 31-MAR-2000 US 09/539945
PC MOLLY F KUIESZ MARTIN,YUANGANG LIU
PC C1201/68,C07K14/47,C12N15/09,G01N33/15,G01N33/50,G01N33/53, PC
G01N33/56//
PC C12M1/00,C12M1/20,C12M1/34,C12N15/00
CC Method for quantifying DNA binding activity of DNA binding proteins
FH Key Location/Qualifiers
FT source 1..20
Location/Qualifiers
1..20
/organism="Artificial Sequence".
/mol_type="synthetic construct"
/db_xref="taxon:32630"

FEATURES
source
Location/Qualifiers
1..20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.4%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 63;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 948 AAAGGGAACAAAGCGGT 967
DB 1 AAAGGGAACAAAGCGGT 20

RESULT 106
LOCUS AX003437 18 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 17 from Patent WO9928439.
ACCESSION AX003437
VERSION AX003437.1 GI:9927241
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE 1 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
JOURNAL Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.

TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 17 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
source
Location/Qualifiers
1..18
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2543 CTTAAAACTCTCCAGAC 2560
DB 1 CTTAAAACTCTCCAGAC 18

RESULT 107
LOCUS AX003454 18 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 34 from Patent WO9928439.
ACCESSION AX003454
VERSION AX003454.1 GI:9927258
KEYWORDS JP 2001525163-A/17.
SOURCE B19 virus
ORGANISM B19 virus
Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE 1 Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
JOURNAL Patent: WO 9928439-A 34 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
source
Location/Qualifiers
1..18
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4288 TCAGCTGTGAGTAAAT 4305
DB 1 TCAGCTGTGAGTAAAT 18

RESULT 108
LOCUS BD087053 18 bp DNA linear PAT 27-AUG-2002
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087053
VERSION BD087053.1 GI:22632663
KEYWORDS JP 2001525163-A/17.
SOURCE B19 virus
ORGANISM B19 virus
Viruses; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 18)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof.
JOURNAL Patent: JP 2001525163-A 17 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/17
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PI 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C1201/68, PC
G01N33/53,

PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..18
/organism='Erythrovirus'
Location/Qualifiers
1..18
/organism='Erythrovirus'
/mol_type='genomic DNA'
/db_xref='taxon:40121'

FEATURES
source

Query Match 0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2543 CTTAAAACTCTCCAGAC 2560
1 CTTAAAACTCTCCAGAC 18
|||||

RESULT 109
BD087070 18 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
DEFINITION BD087070
ACCESSION BD087070.1 GI:22632680
VERSION JP 2001525163-A/34.
KEYWORDS Erythrovirus
SOURCE Erythrovirus
ORGANISM Erythrovirus
VIRUSES; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 18)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 34 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/34
PD 11-DEC-2001 JP 2000523317
PR 03-DEC-1998 JP 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..18
/organism='Erythrovirus'.
Location/Qualifiers
1..18
/organism='Erythrovirus'
/mol_type='genomic DNA'
/db_xref='taxon:40121'

FEATURES
source

Query Match 0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4288 TCAGCTGTGAGTAAAT 4305
1 TCAGCTGTGAGTAAAT 18
|||||

RESULT 110
AX003429 17 bp DNA linear PAT 07-SEP-2000
LOCUS AX003429
DEFINITION Sequence 9 from Patent WO9928439.
ACCESSION AX003429
VERSION AX003429.1 GI:9927233
KEYWORDS B19 virus
SOURCE B19 virus
ORGANISM Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 9 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
Location/Qualifiers
1..17
/organism='B19 virus'
/mol_type='unassigned DNA'
/db_xref='taxon:10798'

FEATURES
source

Query Match 0.3%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1777 TTGATTTCCCTGGAAT 1793
1 TTGATTTCCCTGGAAT 17
|||||

RESULT 111
BD087045 17 bp DNA linear PAT 27-AUG-2002
LOCUS Erythrovirus and application thereof.
DEFINITION BD087045
ACCESSION BD087045
VERSION BD087045.1 GI:22632655
KEYWORDS JP 2001525163-A/9.
SOURCE Erythrovirus
ORGANISM Erythrovirus
VIRUSES; ssDNA viruses; Parvoviridae; Parvovirinae.
REFERENCE 1 (bases 1 to 17)
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 9 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
OS Erythrovirus
PN JP 2001525163-A/9
PD 11-DEC-2001 JP 2000523317
PR 03-DEC-1998 JP 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
C12N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH Key Location/Qualifiers
FT source 1..17
/organism='Erythrovirus'.
Location/Qualifiers
1..17
/organism='Erythrovirus'
/mol_type='genomic DNA'
/db_xref='taxon:40121'

FEATURES
source

Query Match 0.3%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1777 TTGATTTCCCTGGAAT 1793
1 TTGATTTCCCTGGAAT 17
|||||

RESULT 112
AR046079 17 bp DNA linear PAT 29-SEP-1999
LOCUS AR046079
DEFINITION Sequence 872 from patent US 5817796.
ACCESSION AR046079
VERSION AR046079.1 GI:5967544
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 Unclassified.
 1 (bases 1 to 17)
 AUTHORS Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
 TITLE C-myb ribozymes having 2'-5'-linked adenylylate residues
 JOURNAL Patent: US 5817796-A 872 06-OCT-1996;
 FEATURES Location/Qualifiers
 source 1. 17
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match: 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 90;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4379 CAAATATTTTAAAT 4395
 1 CACTATTTTAAAT 17

RESULT 113
 LOCUS 137575 17 bp DNA linear PAT 13-MAY-1997
 DEFINITION Sequence 588 from patent US 5612215.
 ACCSSION 137575
 VERSION 137575.1 GI:2085535
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 17)
 AUTHORS Draper,K.G., Pavco,P., McSwiggen,J., Gustofson,J. and
 Stinchcomb,D.T.
 TITLE Stromelysin targeted ribozymes
 JOURNAL Patent: US 5612215-A 588 18-MAR-1997;
 FEATURES Location/Qualifiers
 source 1. 17
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match: 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 90;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2738 AATGAGCTCAAGCTCG 2754
 1 AATGAGTCAAGCTCG 17

RESULT 114
 LOCUS 153131 17 bp DNA linear PAT 07-OCT-1997
 DEFINITION Sequence 872 from patent US 5646042.
 ACCSSION 153131
 VERSION 153131.1 GI:2474334
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 17)
 AUTHORS Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
 TITLE C-myb targeted ribozymes
 JOURNAL Patent: US 5646042-A 872 08-JUL-1997;
 FEATURES Location/Qualifiers
 source 1. 17
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match: 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 90;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4379 CAAATATTTTAAAT 4395
 1 CACTATTTTAAAT 17

Db 1 CATATATTTTAAAT 17

RESULT 115
 LOCUS 194425 17 bp DNA linear PAT 01-DEC-1998
 DEFINITION Sequence 588 from patent US 5731295.
 ACCSSION 194425
 VERSION 194425.1 GI:3938895
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 17)
 AUTHORS Draper,K.G., Pavco,P., McSwiggen,J., Gustofson,J. and
 Stinchcomb,D.T.
 TITLE Method of reducing stromelysin RNA via ribozymes
 JOURNAL Patent: US 5731295-A 588 24-MAR-1998;
 FEATURES Location/Qualifiers
 source 1. 17
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match: 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 90;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2738 AATGAGCTCAAGCTCG 2754
 1 AATGAGTCAAGCTCG 17

RESULT 116
 LOCUS ARI86282 17 bp DNA linear PAT 20-APR-2002
 DEFINITION Sequence 1770 from patent US 6346398.
 ACCSSION ARI86282
 VERSION ARI86282.1 GI:20232247
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 17)
 AUTHORS Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
 TITLE Method and reagent for the treatment of diseases or conditions
 JOURNAL Patent: US 6346398-A 1770 12-FEB-2002;
 FEATURES Location/Qualifiers
 source 1. 17
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match: 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 90;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2282 TGTACTTGTAAAAA 2238
 1 TGTACTTGTAAAAA 17

RESULT 117
 LOCUS ARI88765 17 bp DNA linear PAT 20-APR-2002
 DEFINITION Sequence 4253 from patent US 6346398.
 ACCSSION ARI88765
 VERSION ARI88765.1 GI:20234730
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 17)
 AUTHORS Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.

QY 2282 TGTACTTGTAAAAA 2238
 1 TGTACTTGTAAAAA 17

TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor

JOURNAL Patent: US 6346398-A 4253 12-FEB-2002;

FEATURES Location/Qualifiers

1.17

/organism="unknown"

/mol_type="unassigned DNA"

Query Match 0.3%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 90;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 703 ACCAAGGAAATATTT 719

Db 17 ACCTAAGGAAATATTT 1

RESULT 118

LOCUS AR190335/c 17 bp DNA linear PAT 20-APR-2002

DEFINITION Sequence 5823 from patent US 6346398.

ACCESSION AR190335

VERSION AR190335.1 GI:20236300

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

REFERENCE 1 (bases 1 to 17)

AUTHORS Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.

TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor

JOURNAL Patent: US 6346398-A 5823 12-FEB-2002;

FEATURES Location/Qualifiers

1.17

/organism="unknown"

/mol_type="unassigned DNA"

Query Match 0.3%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 90;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 703 ACCAAGGAAATATTT 719

Db 17 ACCTAAGGAAATATTT 1

RESULT 119

LOCUS AR322913 17 bp RNA linear PAT 17-AUG-2003

DEFINITION Sequence 315 from patent US 6566127.

ACCESSION AR322913

VERSION AR322913.1 GI:33708721

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

REFERENCE 1 (bases 1 to 17)

AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.

TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor

JOURNAL Patent: US 6566127-A 315 20-MAY-2003;

FEATURES Location/Qualifiers

1.17

/organism="unknown"

/mol_type="unassigned RNA"

Query Match 0.3%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 90;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2282 TGTTAACTTGTAATAA 2298

Db 1 TGTTAACTTGGAATAA 17

RESULT 120

LOCUS AR324618/c 17 bp RNA linear PAT 17-AUG-2003

DEFINITION Sequence 2020 from patent US 6566127.

ACCESSION AR324618

VERSION AR324618.1 GI:33710426

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

REFERENCE 1 (bases 1 to 17)

AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.

TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor

JOURNAL Patent: US 6566127-A 2020 20-MAY-2003;

FEATURES Location/Qualifiers

1.17

/organism="unknown"

/mol_type="unassigned RNA"

Query Match 0.3%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 90;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 703 ACCAAGGAAATATTT 719

Db 17 ACCTAAGGAAATATTT 1

RESULT 121

LOCUS AX099963/c 17 bp DNA linear PAT 02-APR-2001

DEFINITION Sequence 23 from Patent WO0120034.

ACCESSION AX099963

VERSION AX099963.1 GI:13538973

KEYWORDS

SOURCE Mus musculus (house mouse)

ORGANISM Mus musculus

REFERENCE 1

AUTHORS Voss,J. and Timm,J.

TITLE Methods and compositions for the screening of cell cycle modulators

JOURNAL Patent: WO 0120034-A 23 22-MAR-2001;

FEATURES Location/Qualifiers

1.17

/organism="Mus musculus"

/mol_type="unassigned DNA"

/db_xref="taxon:10090"

Query Match 0.3%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 90;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2483 GATTAATCTTTAGAAA 2499

Db 17 GATTAACCTTTAGAAA 1

RESULT 122

LOCUS AX691246/c 17 bp DNA linear PAT 31-MAR-2003

DEFINITION Sequence 3978 from Patent EP1281758.

ACCESSION AX691246

VERSION AX691246.1 GI:29414182

KEYWORDS

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1

AUTHORS Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.

```

REFERENCE
1
AUTHORS Shannon,M., Gu,Y. and Nguyen,C.T.
TITLE Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and mdz12
JOURNAL Patent: EP 1281758-A 3978 05-FEB-2003;
Neomica, Inc. (US)
FEATURES
source
Location/Qualifiers
1..17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 90;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3937 AGGTGCGGAAAGCC 3953
Db 17 AGGTGATGAGAAAGCC 1

RESULT 123
AX724252 17 bp DNA linear PAT 08-MAY-2003
LOCUS
DEFINITION Sequence 1939 from Patent WO03025176.
ACCESSION AX724252
VERSION AX724252.1 GI:30503595
KEYWORDS
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus

REFERENCE
1
AUTHORS Telerman,A., Amson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
JOURNAL Patent: WO 03025176-A 1939 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES
source
Location/Qualifiers
1..17
/organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"

Query Match
0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 90;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 78 GATTGGTGTCTTCTTT 94
Db 1 GATCTGTGTCTTCTTT 17

RESULT 124
AX724252 17 bp DNA linear PAT 08-MAY-2003
LOCUS
DEFINITION Sequence 1939 from Patent WO03025176.
ACCESSION AX724252
VERSION AX724252.1 GI:30503595
KEYWORDS
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus

REFERENCE
1
AUTHORS Telerman,A., Amson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
JOURNAL Patent: WO 03025176-A 1939 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES
source
Location/Qualifiers

```

```

source
1..17
/organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"

Query Match
0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 90;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4935 AAAGAAGACCAATC 4951
Db 17 AAAGAAGACCCGATC 1

RESULT 125
AX003456 21 bp DNA linear PAT 07-SEP-2000
LOCUS
DEFINITION Sequence 36 from Patent WO9928439.
ACCESSION AX003456
VERSION AX003456.1 GI:9927260
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus

REFERENCE
1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,Q.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 9928439-A 36 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
source
Location/Qualifiers
1..21
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match
0.3%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4383 TATTTTAAATAACT 4398
Db 21 TATTTTAAATAATAT 6

RESULT 126
BD087072 21 bp DNA linear PAT 27-AUG-2002
LOCUS
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087072
VERSION BD087072.1 GI:22632682
KEYWORDS
SOURCE JP 2001525163-A/36.
ORGANISM Erythrovirus

REFERENCE
1
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 36 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT
OS Erythrovirus
PN JP 2001525163-A/36
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN, CHENON ANTOINE GARBARG, VERONIQUE AUGUSTE PC
C1N1S/09,A6IK39/12,A6IK48/00,C07K14/015,C07K16/08,C12Q1/68, PC
G01N33/53.
PC C12N15/00
CC Erythrovirus and application thereof
FH Key location/Qualifiers
FT source 1..21
/organism='Erythrovirus'.

```


FEATURES
source Location/Qualifiers
1..21
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.3%; Score 14.4; DB 1; Length 21;
Best Local Similarity 93.8%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4383 TATTTTAAATAACT 4398
DB 21 TATTTTAAATAACT 6

RESULT 127
AX003481/c 30 bp DNA linear PAT 07-SEP-2000
LOCUS
DEFINITION Sequence 61 from Patent WO928439.
ACCESSION AX003481
VERSION AX003481.1 GI:9927334
KEYWORDS
SOURCE B19 virus
ORGANISM B19 virus
REFERENCE 1
AUTHORS Auguste,V., Garbarg-Chenon,A. and Nguyen,O.T.
TITLE Erythrovirus and its applications
JOURNAL Patent: WO 928439-A 61 10-JUN-1999;
ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG
CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
source Location/Qualifiers
1..30
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

Query Match 0.3%; Score 13.2; DB 1; Length 30;
Best Local Similarity 83.3%; Pred. No. 1.6e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3769 AATGTACAACCTTTGTA 3786
DB 30 AATCTACAAAACCTTTGTA 13

RESULT 128
BD087097/c 30 bp DNA linear PAT 27-AUG-2002
LOCUS
DEFINITION Erythrovirus and application thereof.
ACCESSION BD087097
VERSION BD087097.1 GI:22632707
KEYWORDS JP 2001525163-A/61.
SOURCE Erythrovirus
ORGANISM Erythrovirus
REFERENCE 1
AUTHORS Nguyen,Q.T., Garbarg,C.A. and Auguste,V.
TITLE Erythrovirus and application thereof
JOURNAL Patent: JP 2001525163-A 61 11-DEC-2001;
ASSISTANCE PUBLIQUE HOPITAUX DE PARIS
COMMENT OS Erythrovirus
PM JP 2001525163-A/61
PD 11-DEC-2001
PF 03-DEC-1998 JP 2000523317
PR 03-DEC-1997 FR 97/15197
PI QUANG TRI NGUYEN,CHENON ANTOINE GARBARG,VERONIQUE AUGUSTE PC
CI2N15/09,A61K39/12,A61K48/00,C07K14/015,C07K16/08,C12Q1/68, PC
GOIN3/53,
PC C12N15/00
CC Erythrovirus and application thereof
FH key Location/Qualifiers
FT source 1..30

FEATURES
source Location/Qualifiers
1..30
/organism="Erythrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:40121"

Query Match 0.3%; Score 13.2; DB 1; Length 30;
Best Local Similarity 83.3%; Pred. No. 1.6e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3769 AATGTACAACCTTTGTA 3786
DB 30 AATCTACAAAACCTTTGTA 13

RESULT 129
A87941/c 14 bp DNA linear PAT 22-JAN-2000
LOCUS
DEFINITION Sequence 89 from Patent WO9833904.
ACCESSION A87941
VERSION A87941.1 GI:6736511
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1
AUTHORS Brysch,W.D. and Schlingensiepen,K.
TITLE AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
JOURNAL Patent: WO 9833904-A 89 06-AUG-1998;
BIOGHOSTIK GES (DE); BRYSCH WOLFGANG (DE)
FEATURES
source Location/Qualifiers
1..14
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

Query Match 0.3%; Score 13; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3730 CCCAGAAAACCTTA 3742
DB 14 CCCAGAAAACCTTA 2

RESULT 130
A89908/c 14 bp DNA linear PAT 22-JAN-2000
LOCUS
DEFINITION Sequence 89 from Patent EP0856579.
ACCESSION A89908
VERSION A89908.1 GI:6738422
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1
AUTHORS Brysch,W.D. and Schlingensiepen,K.D.
TITLE An antisense oligonucleotide preparation method
JOURNAL Patent: EP 0856579-A 89 05-AUG-1998;
BIOGHOSTIK GES (DE)
FEATURES
source Location/Qualifiers
1..14
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

Query Match 0.3%; Score 13; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3730 CCCAGAAAACCTTA 3742
DB 14 CCCAGAAAACCTTA 2

DB 14 CCCAGAAACCTA 2

RESULT 131

BD065454/c 14 bp DNA linear PAT 27-AUG-2002

LOCUS An antisense oligonucleotide preparation method.

DEFINITION BD065454

ACCESSION BD065454.1 GI:22611057

VERSION JP 2001511000-A/89.

KEYWORDS unidentified

SOURCE unidentified

ORGANISM unclassified.

REFERENCE 1 (bases 1 to 14)

AUTHORS Schlingensiepen,K.H. and Brysch,W.

TITLE An antisense oligonucleotide preparation method

JOURNAL Patent: JP 2001511000-A 89 07-AUG-2001;

BIOLOGISTIK GESELLSCHAFT FÜR BIOMOLEKULARE DIAGNOSTIK MBH

COMMENT OS Unknown

PN JP 2001511000-A/89

PD 07-AUG-2001

PR 30-JAN-1998 JP 1998532533

PI 31-JAN-1997 EP 97101531.8

PC C12N15/11,C07H21/04,A61K31/70

CC An antisense oligonucleotide preparation method FH Key

Location/Qualifiers

FT source 1..14

Location/Qualifiers

1..14

/organism="Unknown".

Location/Qualifiers

1..14

/organism="unidentified"

/mol_type="genomic DNA"

/db_xref="taxon:32644"

Query Match 0.3%; Score 13; DB 1; Length 14;

Best Local Similarity 100.0%; Pred. No. 1.1e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3730 CCCAGAAACCTA 3742

DB 14 CCCAGAAACCTA 2

Search completed: April 22, 2004, 06:30:17

Job time : 8 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 22, 2004, 06:32:50 ; Search time 12 Seconds
(without alignments)
3.595 Million cell updates/sec

Title: us-09-555-640-1
Perfect score: 5028
Sequence: 1 gacgcacaggaatgacgt.....acgtatcttcctgtgacgac 5028

Scoring table: IDENTITY_NUC
Gapop 10.0, Gapext 0.5

Searched: 270 seqs, 4290 residues

Total number of hits satisfying chosen parameters: 540

Minimum DB seq length: 10
Maximum DB seq length: 30

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 291 summaries

Database : rng.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	30	0.6	30	1	AAH03067
2	30	0.6	30	1	AAH03067
3	30	0.6	30	1	AAH03067
4	30	0.6	30	1	AAH03067
5	30	0.6	30	1	AAH03067
6	30	0.6	30	1	AAH03067
7	30	0.6	30	1	AAH03067
8	29	0.6	29	1	AAH03067
9	28	0.6	28	1	AAH03067
10	27	0.5	27	1	AAH03067
11	27	0.5	27	1	AAH03067
12	27	0.5	27	1	AAH03067
13	26	0.5	26	1	AAH03067
14	26	0.5	26	1	AAH03067
15	26	0.5	26	1	AAH03067
16	26	0.5	26	1	AAH03067
17	25	0.5	25	1	AAH03067
18	25	0.5	25	1	AAH03067
19	24	0.5	24	1	AAH03067
20	24	0.5	24	1	AAH03067
21	23	0.5	23	1	AAH03067
22	23	0.5	23	1	AAH03067
23	23	0.5	23	1	AAH03067
24	23	0.5	23	1	AAH03067
25	23	0.5	23	1	AAH03067
26	23	0.5	23	1	AAH03067
27	23	0.5	23	1	AAH03067
28	23	0.5	23	1	AAH03067
29	23	0.5	23	1	AAH03067
30	23	0.5	23	1	AAH03067
31	22	0.4	22	1	AAH03067
32	22	0.4	22	1	AAH03067
33	22	0.4	22	1	AAH03067

34	22	0.4	22	1	AAH03067	Microorganism dete
35	22	0.4	22	1	AAH03067	Parvovirus B19 PCR
36	22	0.4	22	1	AAH03067	Nucleotide sequenc
37	22	0.4	22	1	AAH03067	Nucleotide sequenc
38	22	0.4	22	1	AAH03067	Nucleotide sequenc
39	22	0.4	22	1	AAH03067	Nucleotide sequenc
40	21	0.4	21	1	AAH03067	Microorganism sequ
41	21	0.4	21	1	AAH03067	B19-reverse primer
42	21	0.4	21	1	AAH03067	Probe used to isol
43	21	0.4	21	1	AAH03067	PCR primer used to
44	21	0.4	21	1	AAH03067	PCR primer used to
45	21	0.4	21	1	AAH03067	PCR primer used to
46	21	0.4	21	1	AAH03067	Microorganism dete
47	21	0.4	21	1	AAH03067	Nucleotide sequenc
48	21	0.4	21	1	AAH03067	Nucleotide sequenc
49	21	0.4	21	1	AAH03067	Nucleotide sequenc
50	20	0.4	20	1	AAH03067	Microorganism sequ
51	20	0.4	20	1	AAH03067	PCR primer used to
52	20	0.4	20	1	AAH03067	PCR primer used to
53	20	0.4	20	1	AAH03067	PCR primer used to
54	20	0.4	20	1	AAH03067	PCR primer used to
55	20	0.4	20	1	AAH03067	PCR primer used to
56	20	0.4	20	1	AAH03067	PCR primer used to
57	20	0.4	20	1	AAH03067	PCR primer used to
58	20	0.4	20	1	AAH03067	PCR primer used to
59	19	0.4	19	1	AAH03067	PCR primer used to
60	19	0.4	19	1	AAH03067	PCR primer used to
61	19	0.4	19	1	AAH03067	PCR primer used to
62	19	0.4	19	1	AAH03067	PCR primer used to
63	19	0.4	19	1	AAH03067	PCR primer used to
64	18	0.4	18	1	AAH03067	PCR primer used to
65	18	0.4	18	1	AAH03067	PCR primer used to
66	18	0.4	18	1	AAH03067	PCR primer used to
67	18	0.4	18	1	AAH03067	PCR primer used to
68	18	0.4	18	1	AAH03067	PCR primer used to
69	18	0.4	18	1	AAH03067	PCR primer used to
70	18	0.4	18	1	AAH03067	PCR primer used to
71	18	0.4	18	1	AAH03067	PCR primer used to
72	18	0.4	18	1	AAH03067	PCR primer used to
73	17	0.3	17	1	AAH03067	PCR primer used to
74	17	0.3	17	1	AAH03067	PCR primer used to
75	17	0.3	17	1	AAH03067	PCR primer used to
76	16	0.3	16	1	AAH03067	PCR primer used to
77	16	0.3	16	1	AAH03067	PCR primer used to
78	16	0.3	16	1	AAH03067	PCR primer used to
79	15	0.3	15	1	AAH03067	PCR primer used to
80	15	0.3	15	1	AAH03067	PCR primer used to
81	15	0.3	15	1	AAH03067	PCR primer used to
82	15	0.3	15	1	AAH03067	PCR primer used to
83	15	0.3	15	1	AAH03067	PCR primer used to
84	15	0.3	15	1	AAH03067	PCR primer used to
85	15	0.3	15	1	AAH03067	PCR primer used to
86	15	0.3	15	1	AAH03067	PCR primer used to
87	15	0.3	15	1	AAH03067	PCR primer used to
88	15	0.3	15	1	AAH03067	PCR primer used to
89	15	0.3	15	1	AAH03067	PCR primer used to
90	15	0.3	15	1	AAH03067	PCR primer used to
91	15	0.3	15	1	AAH03067	PCR primer used to
92	15	0.3	15	1	AAH03067	PCR primer used to
93	15	0.3	15	1	AAH03067	PCR primer used to
94	15	0.3	15	1	AAH03067	PCR primer used to
95	15	0.3	15	1	AAH03067	PCR primer used to
96	15	0.3	15	1	AAH03067	PCR primer used to
97	15	0.3	15	1	AAH03067	PCR primer used to
98	15	0.3	15	1	AAH03067	PCR primer used to
99	15	0.3	15	1	AAH03067	PCR primer used to
100	15	0.3	15	1	AAH03067	PCR primer used to
101	15	0.3	15	1	AAH03067	PCR primer used to
102	15	0.3	15	1	AAH03067	PCR primer used to
103	15	0.3	15	1	AAH03067	PCR primer used to
104	15	0.3	15	1	AAH03067	PCR primer used to
105	15	0.3	15	1	AAH03067	PCR primer used to
106	15	0.3	15	1	AAH03067	PCR primer used to

C 107	13	0.3	13	1	ABH17341	Oligonucleotide SE
C 108	13	0.3	13	1	ABP96463	Oligonucleotide SE
C 109	13	0.3	13	1	ABH03634	Oligonucleotide SE
C 110	13	0.3	13	1	ABH44073	Oligonucleotide SE
C 111	13	0.3	13	1	ABG9979	Oligonucleotide SE
C 112	13	0.3	13	1	ABG5469	Oligonucleotide SE
C 113	13	0.3	13	1	ABG61205	Oligonucleotide SE
C 114	13	0.3	13	1	ABG38594	Oligonucleotide SE
C 115	13	0.3	13	1	ABP3465	Oligonucleotide SE
C 116	13	0.3	13	1	ABG49034	Oligonucleotide SE
C 117	13	0.3	13	1	ABH02516	Oligonucleotide SE
C 118	13	0.3	13	1	ABP80047	Oligonucleotide SE
C 119	13	0.3	13	1	ABH48162	Oligonucleotide SE
C 120	13	0.3	13	1	ABH55808	Oligonucleotide SE
C 121	13	0.3	13	1	ABG29747	Oligonucleotide SE
C 122	13	0.3	13	1	ABG15877	Oligonucleotide SE
C 123	13	0.3	13	1	ABP26254	Oligonucleotide SE
C 124	13	0.3	13	1	ABH40445	Oligonucleotide SE
C 125	13	0.3	13	1	ABH45581	Oligonucleotide SE
C 126	13	0.3	13	1	ABG87119	Oligonucleotide SE
C 127	13	0.3	13	1	ABG88723	Oligonucleotide SE
C 128	13	0.3	13	1	ABP26255	Oligonucleotide SE
C 129	13	0.3	13	1	ABP35252	Oligonucleotide SE
C 130	13	0.3	13	1	ABP69986	Oligonucleotide SE
C 131	13	0.3	13	1	ABP76958	Oligonucleotide SE
C 132	13	0.3	13	1	ABH05853	Oligonucleotide SE
C 133	13	0.3	13	1	ABH63756	Oligonucleotide SE
C 134	13	0.3	13	1	ABH43913	Oligonucleotide SE
C 135	13	0.3	13	1	ABH62153	Oligonucleotide SE
C 136	13	0.3	13	1	ABH62479	Oligonucleotide SE
C 137	13	0.3	13	1	ABG49035	Oligonucleotide SE
C 138	13	0.3	13	1	ABG01020	Oligonucleotide SE
C 139	13	0.3	13	1	ABG51623	Oligonucleotide SE
C 140	13	0.3	13	1	ABG29746	Oligonucleotide SE
C 141	13	0.3	13	1	ABG85488	Oligonucleotide SE
C 142	13	0.3	13	1	ABP22170	Oligonucleotide SE
C 143	13	0.3	13	1	ABP22171	Oligonucleotide SE
C 144	13	0.3	13	1	ABP96987	Oligonucleotide SE
C 145	13	0.3	13	1	ABH09678	Oligonucleotide SE
C 146	13	0.3	13	1	ABG53972	Oligonucleotide SE
C 147	13	0.3	13	1	ABG87969	Oligonucleotide SE
C 148	13	0.3	13	1	ABH23866	Oligonucleotide SE
C 149	13	0.3	13	1	ABH27671	Oligonucleotide SE
C 150	13	0.3	13	1	ABP80046	Oligonucleotide SE
C 151	13	0.3	13	1	ABH44072	Oligonucleotide SE
C 152	13	0.3	13	1	ABH62152	Oligonucleotide SE
C 153	13	0.3	13	1	ABH62478	Oligonucleotide SE
C 154	13	0.3	13	1	ABP08587	Oligonucleotide SE
C 155	13	0.3	13	1	ABP93901	Oligonucleotide SE
C 156	13	0.3	13	1	ABG28196	Oligonucleotide SE
C 157	13	0.3	13	1	ABP08586	Oligonucleotide SE
C 158	13	0.3	13	1	ABG61705	Oligonucleotide SE
C 159	13	0.3	13	1	ABG38905	Oligonucleotide SE
C 160	13	0.3	13	1	ABH17340	Oligonucleotide SE
C 161	13	0.3	13	1	ABP93900	Oligonucleotide SE
C 162	13	0.3	13	1	ABH23867	Oligonucleotide SE
C 163	13	0.3	13	1	ABH61838	Oligonucleotide SE
C 164	13	0.3	13	1	ABG93209	Oligonucleotide SE
C 165	13	0.3	13	1	ABG61204	Oligonucleotide SE
C 166	13	0.3	13	1	ABG38595	Oligonucleotide SE
C 167	13	0.3	13	1	ABG38904	Oligonucleotide SE
C 168	13	0.3	13	1	ABH20000	Oligonucleotide SE
C 169	13	0.3	13	1	ABH03635	Oligonucleotide SE
C 170	13	0.3	13	1	ABP54069	Oligonucleotide SE
C 171	13	0.3	13	1	ABP33172	Oligonucleotide SE
C 172	13	0.3	13	1	ABH09679	Oligonucleotide SE
C 173	13	0.3	13	1	ABH48163	Oligonucleotide SE
C 174	13	0.3	13	1	ABG3519	Oligonucleotide SE
C 175	13	0.3	13	1	ABG75853	Oligonucleotide SE
C 176	13	0.3	13	1	ABG88722	Oligonucleotide SE
C 177	13	0.3	13	1	ABG88722	Oligonucleotide SE
C 178	13	0.3	13	1	ABP42913	Oligonucleotide SE
C 179	13	0.3	13	1	ABP42913	Oligonucleotide SE
C 180	13	0.3	13	1	ABH18737	Oligonucleotide SE
C 181	13	0.3	13	1	ABP74976	Oligonucleotide SE
C 182	13	0.3	13	1	ABP76959	Oligonucleotide SE
C 183	13	0.3	13	1	ABG75852	Oligonucleotide SE
C 184	13	0.3	13	1	ABG55712	Oligonucleotide SE
C 185	13	0.3	13	1	ABG15876	Oligonucleotide SE
C 186	13	0.3	13	1	ABP35253	Oligonucleotide SE
C 187	13	0.3	13	1	ABP3197	Oligonucleotide SE
C 188	13	0.3	13	1	ABP63757	Oligonucleotide SE
C 189	13	0.3	13	1	ABG3208	Oligonucleotide SE
C 190	13	0.3	13	1	ABG4831	Oligonucleotide SE
C 191	13	0.3	13	1	ABG53973	Oligonucleotide SE
C 192	13	0.3	13	1	ABF42912	Oligonucleotide SE
C 193	13	0.3	13	1	ABH20001	Oligonucleotide SE
C 194	13	0.3	13	1	ABP6462	Oligonucleotide SE
C 195	13	0.3	13	1	ABP54068	Oligonucleotide SE
C 196	13	0.3	13	1	ABP90055	Oligonucleotide SE
C 197	13	0.3	13	1	ABH43912	Oligonucleotide SE
C 198	13	0.3	13	1	ABH18736	Oligonucleotide SE
C 199	13	0.3	13	1	ABH05852	Oligonucleotide SE
C 200	13	0.3	13	1	ABP90054	Oligonucleotide SE
C 201	13	0.3	13	1	ABG01021	Oligonucleotide SE
C 202	13	0.3	13	1	ABG51622	Oligonucleotide SE
C 203	13	0.3	13	1	ABG61704	Oligonucleotide SE
C 204	13	0.3	13	1	ABH27670	Oligonucleotide SE
C 205	13	0.3	13	1	ABP83173	Oligonucleotide SE
C 206	13	0.3	13	1	ABH40444	Oligonucleotide SE
C 207	13	0.3	13	1	ABH55809	Oligonucleotide SE
C 208	13	0.3	13	1	ABH48500	human c-myc hammer
C 209	13	0.3	13	1	ABH18747	human c-myc hammer
C 210	13	0.3	13	1	ABH17946	Oligonucleotide SE
C 211	13	0.3	13	1	ABP74748	Oligonucleotide SE
C 212	13	0.3	13	1	ABP91347	Oligonucleotide SE
C 213	13	0.3	13	1	ABG62306	Oligonucleotide SE
C 214	13	0.3	13	1	ABG00870	Oligonucleotide SE
C 215	13	0.3	13	1	ABG63768	Oligonucleotide SE
C 216	13	0.3	13	1	ABG63768	Oligonucleotide SE
C 217	13	0.3	13	1	ABP45890	Oligonucleotide SE
C 218	13	0.3	13	1	ABH47998	Oligonucleotide SE
C 219	13	0.3	13	1	ABH58430	Oligonucleotide SE
C 220	13	0.3	13	1	ABH58430	Oligonucleotide SE
C 221	13	0.3	13	1	ABH58430	Oligonucleotide SE
C 222	13	0.3	13	1	ABG27079	Oligonucleotide SE
C 223	13	0.3	13	1	ABG81995	Oligonucleotide SE
C 224	13	0.3	13	1	ABF09106	Oligonucleotide SE
C 225	13	0.3	13	1	ABF29044	Oligonucleotide SE
C 226	13	0.3	13	1	ABH47999	Oligonucleotide SE
C 227	13	0.3	13	1	ABH59163	Oligonucleotide SE
C 228	13	0.3	13	1	ABG27844	Oligonucleotide SE
C 229	13	0.3	13	1	ABG04103	Oligonucleotide SE
C 230	13	0.3	13	1	ABH59144	Oligonucleotide SE
C 231	13	0.3	13	1	ABG73639	Oligonucleotide SE
C 232	13	0.3	13	1	ABG00871	Oligonucleotide SE
C 233	13	0.3	13	1	ABH62307	Oligonucleotide SE
C 234	13	0.3	13	1	ABG04102	Oligonucleotide SE
C 235	13	0.3	13	1	ABH58431	Oligonucleotide SE
C 236	13	0.3	13	1	ABH58431	Oligonucleotide SE
C 237	13	0.3	13	1	ABH17947	Oligonucleotide SE
C 238	13	0.3	13	1	ABH18929	Oligonucleotide SE
C 239	13	0.3	13	1	ABH47171	Oligonucleotide SE
C 240	13	0.3	13	1	ABG27845	Oligonucleotide SE
C 241	13	0.3	13	1	ABG09224	Oligonucleotide SE
C 242	13	0.3	13	1	ABF74749	Oligonucleotide SE
C 243	13	0.3	13	1	ABP56843	Oligonucleotide SE
C 244	13	0.3	13	1	ABP56843	Oligonucleotide SE
C 245	13	0.3	13	1	ABH10371	Oligonucleotide SE
C 246	13	0.3	13	1	ABH10371	Oligonucleotide SE
C 247	13	0.3	13	1	ABP45891	Oligonucleotide SE
C 248	13	0.3	13	1	ABH29522	Oligonucleotide SE
C 249	13	0.3	13	1	ABH59145	Oligonucleotide SE
C 250	13	0.3	13	1	ABP09107	Oligonucleotide SE
C 251	13	0.3	13	1	ABH18928	Oligonucleotide SE
C 252	13	0.3	13	1	ABH47170	Oligonucleotide SE

253	12.6	0.3	13	1	ABH58953	Oligonucleotide SE
254	12.6	0.3	13	1	ABC71205	Oligonucleotide SE
255	12.6	0.3	13	1	ABC09803	Oligonucleotide SE
256	12.6	0.3	13	1	ABP95353	Oligonucleotide SE
257	12.6	0.3	13	1	ABC46939	Oligonucleotide SE
258	12.6	0.3	13	1	ABC63769	Oligonucleotide SE
259	12.6	0.3	13	1	ABC3769	Oligonucleotide SE
260	12.6	0.3	13	1	ABH00436	Oligonucleotide SE
261	12.6	0.3	13	1	ABH28095	Oligonucleotide SE
262	12.6	0.3	13	1	ABC71133	Oligonucleotide SE
263	12.6	0.3	13	1	ABC71204	Oligonucleotide SE
264	12.6	0.3	13	1	ABC09225	Oligonucleotide SE
265	12.6	0.3	13	1	ABC09802	Oligonucleotide SE
266	12.6	0.3	13	1	ABH29523	Oligonucleotide SE
267	12.6	0.3	13	1	ABP56842	Oligonucleotide SE
268	12.6	0.3	13	1	ABC46938	Oligonucleotide SE
269	12.6	0.3	13	1	ABP29045	Oligonucleotide SE
270	12.6	0.3	13	1	ABP29045	Oligonucleotide SE
271	12.6	0.3	13	1	ABP5352	Oligonucleotide SE
272	12.6	0.3	13	1	ABP91346	Oligonucleotide SE
273	12.6	0.3	13	1	ABC71132	Oligonucleotide SE
274	12.6	0.3	13	1	ABC73638	Oligonucleotide SE
275	12.6	0.3	13	1	ABC7078	Oligonucleotide SE
276	12.6	0.3	13	1	ABC81994	Oligonucleotide SE
277	12.6	0.3	13	1	ABP97492	Oligonucleotide SE
278	12.6	0.3	13	1	ABP97493	Oligonucleotide SE
279	12.6	0.3	13	1	ABH00437	Oligonucleotide SE
280	12.6	0.3	13	1	ABH28094	Oligonucleotide SE
281	12.6	0.3	13	1	ABH10370	Oligonucleotide SE
282	12.6	0.3	13	1	ABH10370	Oligonucleotide SE
283	12.6	0.3	13	1	ABH58952	Oligonucleotide SE
284	12.6	0.3	13	1	ABH58952	Oligonucleotide SE
285	12.6	0.3	24	1	ABZ59580	Human parvovirus B
286	12.4	0.2	26	1	AAK57350	Parvovirus detect1
287	12.2	0.2	23	1	AAK81615	PCR primer used to
288	12	0.2	13	1	ABP42913	Oligonucleotide SE
289	12	0.2	13	1	ABP42912	Oligonucleotide SE
290	12	0.2	13	1	ABC71205	Oligonucleotide SE
291	12	0.2	13	1	ABC71204	Oligonucleotide SE

ALIGNMENTS

RESULT 1
 AAX81642
 ID AAX81642 standard; DNA; 30 BP.
 XX
 AC AAX81642;
 XX
 DT 26-AUG-1999 (first entry)
 XX
 DE Probe used to isolate erythrovirus V9 nucleotide sequences.
 XX
 DE Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KW erythrovirus screening; typing; immunoassay; probe; ss.
 XX
 OS Synthetic.
 OS Erythrovirus.
 OS
 PN FR2771751-A1.
 XX
 PD 04-JUN-1999.
 XX
 PF 03-DEC-1997; 97FR-00015197.
 XX
 PR 03-DEC-1997; 97FR-00015197.
 XX
 PA (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
 XX
 PI Nguyen QT, Garbarg CA, Auguste V;
 XX
 DR WPI; 1999-349543/30.

XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.
 PS Claim 3; Page 35; 80pp; French.
 XX
 CC AAX81630-X81666 represent probes used to isolate erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections
 XX
 SQ Sequence 30 BP; 10 A; 4 C; 7 G; 9 T; 0 U; 0 Other;
 Query Match 0.6%; Score 30; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 3.7;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1703 ATGTACACAAATGCTTAAGTGTATG 1732
 DB 1 ATGTACACAAATGCTTAAGTGTATG 30
 AAX81647
 ID AAX81647 standard; DNA; 30 BP.
 XX
 AC AAX81647;
 XX
 DT 26-AUG-1999 (first entry)
 XX
 DE Probe used to isolate erythrovirus V9 nucleotide sequences.
 XX
 DE Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KW erythrovirus screening; typing; immunoassay; probe; ss.
 XX
 OS Synthetic.
 OS Erythrovirus.
 OS
 PN FR2771751-A1.
 XX
 PD 04-JUN-1999.
 XX
 PF 03-DEC-1997; 97FR-00015197.
 XX
 PR 03-DEC-1997; 97FR-00015197.
 XX
 PA (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
 XX
 PI Nguyen QT, Garbarg CA, Auguste V;
 XX
 DR WPI; 1999-349543/30.
 XX
 PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.
 XX
 PS Claim 3; Page 37; 80pp; French.
 XX
 CC AAX81630-X81666 represent probes used to isolate erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections
 XX
 SQ Sequence 30 BP; 8 A; 4 C; 6 G; 12 T; 0 U; 0 Other;
 Query Match 0.6%; Score 30; DB 1; Length 30;

DR WPI; 1999-349543/30.
 XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.
 PS Claim 3; Page 32; 80pp; French.
 XX AAX81630-X81666 represent probes used to isolate erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections
 XX
 SQ Sequence 30 BP; 11 A; 4 C; 1 G; 14 T; 0 U; 0 Other;
 Query Match 0.6%; Score 30; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 3.7;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 301 ATTTATACACTTAAATTACTACATG 330
 DB 1 ATTTATACACTTAAATTACTACATG 30
 RESULT 6
 AAX81627
 ID AAX81627 standard; DNA; 30 BP.
 XX
 AC AAX81627;
 XX
 DT 26-AUG-1999 (first entry)
 XX
 DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
 XX
 DE Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
 XX
 OS Synthetic.
 OS Erythrovirus.
 XX
 PN FR2771751-A1.
 XX
 PD 04-JUN-1999.
 XX
 PF 03-DEC-1997; 97FR-00015197.
 XX
 PR 03-DEC-1997; 97FR-00015197.
 XX
 PA (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
 XX
 PI Nguyen QT, Garbarg CA, Auguste V;
 XX
 DR WPI; 1999-349543/30.
 XX
 PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.
 PS Claim 3; Page 31; 80pp; French.
 XX AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections
 XX
 SQ Sequence 30 BP; 10 A; 9 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 29; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 3.7;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4655 GCCAAAAGCCGTGTGACCCATTGTAAACA 4684
 DB 1 GCCAAAAGCCGTGTGACCCATTGTAAACA 30
 RESULT 7
 AAX81589
 ID AAX81589 standard; DNA; 29 BP.
 XX
 AC AAX81589;
 XX
 DT 26-AUG-1999 (first entry)
 XX
 DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
 XX
 DE Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
 XX
 OS Synthetic.
 OS Erythrovirus.
 XX
 PN FR2771751-A1.
 XX
 PD 04-JUN-1999.
 XX
 PF 03-DEC-1997; 97FR-00015197.
 XX
 PR 03-DEC-1997; 97FR-00015197.
 XX
 PA (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
 XX
 PI Nguyen QT, Garbarg CA, Auguste V;
 XX
 DR WPI; 1999-349543/30.
 XX
 PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.
 PS Claim 3; Page 22; 80pp; French.
 XX AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections
 XX
 SQ Sequence 29 BP; 12 A; 1 C; 8 G; 8 T; 0 U; 0 Other;
 Query Match 0.6%; Score 29; DB 1; Length 29;
 Best Local Similarity 100.0%; Pred. No. 4.8;
 Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 718 TTTAGAGATGAGAGAGTTTATAGAAA 746
 DB 1 TTTAGAGATGAGAGAGTTTATAGAAA 29
 RESULT 8
 AAX81626
 ID AAX81626 standard; DNA; 29 BP.
 XX
 AC AAX81626;
 XX
 DT 26-AUG-1999 (first entry)
 XX
 DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

```

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
KM Erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX Synthetic.
OS Erythrovirus.
XX FR2771751-A1.
XX 04-JUN-1999.
XX 03-DEC-1997; 97FR-00015197.
XX 03-DEC-1997; 97FR-00015197.
XX (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX Nguyen QT, Garbarg CA, Auguste V;
XX WPI; 1999-349543/30.
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT diagnosis of its infections.
XX Claim 3; Page 31; 80pp; French.
XX AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC polynucleotide sequences (AAX81580) can be used for differential
CC diagnosis of erythrovirus (parvovirus) infections by a combination of
CC amplification and hybridisation assay. The probes can also be used to
CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC diagnosis of erythrovirus V9 infections
XX
XX Sequence 29 BP; 11 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4625 GGATATGAAAAGCCTGAGAAATTGTGAC 4653
Db 1 GGATATGAAAAGCCTGAGAAATTGTGAC 29
RESULT 9
AAX81643
ID AAX81643 standard; DNA; 28 BP.
XX
XX AAX81643;
AC
XX 26-AUG-1999 (first entry)
DT
XX Probe used to isolate erythrovirus V9 nucleotide sequences.
DE
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
KM erythrovirus screening; typing; immunoassay; probe; ss.
XX Synthetic.
OS Erythrovirus.
XX FR2771751-A1.
XX 04-JUN-1999.
XX 03-DEC-1997; 97FR-00015197.
XX 03-DEC-1997; 97FR-00015197.
XX (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX Nguyen QT, Garbarg CA, Auguste V;
XX
XX

```

```

XX WPI; 1999-349543/30.
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT diagnosis of its infections.
XX Claim 3; Page 35; 80pp; French.
XX AAX81630-X81666 represent probes used to isolate erythrovirus V9
CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC polynucleotide sequences (AAX81580) can be used for differential
CC diagnosis of erythrovirus (parvovirus) infections by a combination of
CC amplification and hybridisation assay. The probes can also be used to
CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC diagnosis of erythrovirus V9 infections
XX
XX Sequence 28 BP; 11 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 28; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 6.1;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1733 CACAAAGCTGAGCCACTATGAAAAC TG 1760
Db 1 CACAAAGCTGAGCCACTATGAAAAC TG 28
RESULT 10
ACC43286
ID ACC43286 standard; DNA; 29 BP.
XX
XX ACC43286;
AC
XX 27-OCT-2003 (revised)
DT
XX 11-AUG-2003 (first entry)
DT
XX Nucleotide sequence of a PCR primer for human parvovirus B19 DNA.
DE
XX Parvovirus detection; PCR; primer; ss.
KM
XX B19 virus.
OS
XX WC2003020742-A1.
XX 13-MAR-2003.
XX 30-AUG-2002; 2002WC-US027734.
XX 31-AUG-2001; 2001US-0316691P.
XX (GENP-) GEN-PROBE INC.
XX Brenzano ST, Batranita-Kaminsky M, Hasselkus-Light CS, Kolik DP;
PI WPI; 2003-300859/29.
XX
XX Detecting human parvovirus B19 nucleic acid in biological sample involves
PT carrying out amplification reaction of parvovirus B19 nucleic acid using
PT human parvovirus specific nucleic acid oligomers.
XX Claim 1; Page 43; 54pp; English.
XX
XX The present sequence represents a primer for parvovirus B19 DNA. It is
CC used in the method of the invention. The specification describes a method
CC of detecting human parvovirus B19 nucleic acid in a biological sample.
CC The method comprises amplifying in vitro a portion of human parvovirus
CC B19 nucleic acid, and detecting an amplified product using a labeled
CC detection probe that hybridizes specifically with the amplified product.
CC The method is useful for detecting human parvovirus B19 nucleic acid in
CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)
XX
XX Sequence 29 BP; 7 A; 8 C; 2 G; 12 T; 0 U; 0 Other;
SQ

```


Query Match 0.5%; Score 27.4; DB 1; Length 29;
 Best Local Similarity 96.6%; Pred. No. 8.2;
 Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2551 CTCTCCAGACCTATATAGTCATCTTTC 2579
 |||||
 DB 1 CTCTCCAGACTTATATAGTCATCTTTC 29

RESULT 11
 ACC43294
 ID ACC43294 standard; DNA; 28 BP.
 XX
 AC ACC43294;

XX 27-OCT-2003 (revised)
 DT 11-AUG-2003 (first entry)
 XX

DE Nucleotide sequence of a target from human parvovirus B19 DNA.

XX Parvovirus detection; ss.

XX B19 virus.

XX MO2003020742-A1.

XX 13-MAR-2003.

XX 30-AUG-2002; 2002WO-US027734.

XX 31-AUG-2001; 2001US-0316691P.

XX (GENP-) GEN-PROBE INC.

XX Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;

XX WPI; 2003-300859/29.

PT Detecting human parvovirus B19 nucleic acid in biological sample involves
 PT carrying out amplification reaction of parvovirus B19 nucleic acid using
 PT human parvovirus specific nucleic acid oligomers.

XX Disclosure; Page 44; 54pp; English.

CC The present sequence represents a target from parvovirus B19 DNA. It is
 CC used in the method of the invention. The specification describes a method
 CC of detecting human parvovirus B19 nucleic acid in a biological sample.
 CC The method comprises amplifying in vitro a portion of human parvovirus
 CC B19 nucleic acid, and detecting an amplified product using a labeled
 CC detection probe that hybridizes specifically with the amplified product.
 CC The method is useful for detecting human parvovirus B19 nucleic acid in
 CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)

XX Sequence 28 BP; 9 A; 5 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 27; DB 1; Length 28;
 Best Local Similarity 100.0%; Pred. No. 8.6;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2786 AGGATTCATGACTTTAGGTATAGCCAA 2812
 |||||
 DB 1 AGGATTCATGACTTTAGGTATAGCCAA 27

RESULT 12
 ACC43273/c
 ID ACC43273 standard; DNA; 28 BP.
 XX
 AC ACC43273;

XX 27-OCT-2003 (revised)
 DT 11-AUG-2003 (first entry)
 XX

XX Nucleotide sequence of a capture probe for human parvovirus B19 DNA.
 DE Parvovirus detection; probe; ss.
 XX
 KM Parvovirus detection; probe; ss.

XX B19 virus.
 OS
 XX MO2003020742-A1.
 PN
 XX 13-MAR-2003.
 PD
 XX 30-AUG-2002; 2002WO-US027734.
 PF
 XX 31-AUG-2001; 2001US-0316691P.
 PR
 XX (GENP-) GEN-PROBE INC.

XX Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;
 XX WPI; 2003-300859/29.

XX 27-OCT-2003 (revised)
 DT 11-AUG-2003 (first entry)
 XX

DE Nucleotide sequence of a target from human parvovirus B19 DNA.

XX Parvovirus detection; ss.

XX B19 virus.

XX MO2003020742-A1.

XX 13-MAR-2003.

XX 30-AUG-2002; 2002WO-US027734.

XX 31-AUG-2001; 2001US-0316691P.

XX (GENP-) GEN-PROBE INC.

XX Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;

XX WPI; 2003-300859/29.

PT Detecting human parvovirus B19 nucleic acid in biological sample involves
 PT carrying out amplification reaction of parvovirus B19 nucleic acid using
 PT human parvovirus specific nucleic acid oligomers.

XX Claim 1; Page 40; 54pp; English.

CC The present sequence represents a probe for parvovirus B19 DNA. It is
 CC used in the method of the invention. The specification describes a method
 CC of detecting human parvovirus B19 nucleic acid in a biological sample.
 CC The method comprises amplifying in vitro a portion of human parvovirus
 CC B19 nucleic acid, and detecting an amplified product using a labeled
 CC detection probe that hybridizes specifically with the amplified product.
 CC The method is useful for detecting human parvovirus B19 nucleic acid in
 CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)

XX Sequence 28 BP; 8 A; 6 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.5%; Score 27; DB 1; Length 28;
 Best Local Similarity 100.0%; Pred. No. 8.6;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2786 AGGATTCATGACTTTAGGTATAGCCAA 2812
 |||||
 DB 28 AGGATTCATGACTTTAGGTATAGCCAA 2

RESULT 13
 AAX81602
 ID AAX81602 standard; DNA; 26 BP.
 XX
 AC AAX81602;

XX 26-AUG-1999 (first entry)
 DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
 XX Erythrovirus V9, differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
 XX Synthetic.
 OS Erythrovirus.
 XX FR2771751-A1.
 PN
 XX 04-JUN-1999.
 PD
 XX 03-DEC-1997; 97FR-00015197.
 PF
 XX 03-DEC-1997; 97FR-00015197.
 PR
 XX (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
 XX

```

PI  Nguyen QT, Garbarg CA, Auguste V;
XX
XX  WPI, 1999-349543/30.
XX  Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT  diagnosis of its infections.
XX
PS  Claim 3; Page 25; 80pp; French.
XX
XX  AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC  polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC  polynucleotide sequences (AAX81580) can be used for differential
CC  diagnosis of erythrovirus (parvovirus) infections by a combination of
CC  amplification and hybridisation assay. The probes can also be used to
CC  assess susceptibility to erythrovirus infection and for erythrovirus
CC  screening and typing. The antibodies can be used in immunoassays for
CC  diagnosis of erythrovirus V9 infections
XX
SQ  Sequence 26 BP; 8 A; 4 C; 5 G; 9 T; 0 U; 0 Other;

Query Match          0.5%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 9.9;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2293 AAAAAATGCTTACCTGCTCGATT 2318
    |||||
    1 AAAAAATGCTTACCTGCTCGATT 26

Db

RESULT 14
AAX81614
ID  AAX81614 standard; DNA; 26 BP.
AC  AAX81614;
XX
XX  26-AUG-1999 (first entry)
XX
XX  PCR primer used to amplify erythrovirus V9 nucleotide sequences.
DE
XX  Erythrovirus V9; differential diagnosis; parvovirus; infection;
KW  erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
XX  Synthetic.
OS  Erythrovirus.
XX
XX  FR2771751-A1.
PN
XX
XX  04-JUN-1999.
PD
XX
XX  03-DEC-1997; 97FR-00015197.
PF
XX
XX  03-DEC-1997; 97FR-00015197.
PR
XX
XX  (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
PA
XX
XX  Nguyen QT, Garbarg CA, Auguste V;
XX
XX  WPI, 1999-349543/30.
DR
XX
XX  Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT  diagnosis of its infections.
XX
XX  Claim 3; Page 28; 80pp; French.
XX
XX  AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC  polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC  polynucleotide sequences (AAX81580) can be used for differential
CC  diagnosis of erythrovirus (parvovirus) infections by a combination of
CC  amplification and hybridisation assay. The probes can also be used to
CC  assess susceptibility to erythrovirus infection and for erythrovirus
CC  screening and typing. The antibodies can be used in immunoassays for
CC  diagnosis of erythrovirus V9 infections
XX

```

```

SQ  Sequence 26 BP; 6 A; 7 C; 9 G; 4 T; 0 U; 0 Other;

Query Match          0.5%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 9.9;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  3032 TCTGCAGAACCCAGCACTGTGCAGG 3057
    |||||
    1 TCTGCAGAACCCAGCACTGTGCAGG 26

Db

RESULT 15
AAX81619
ID  AAX81619 standard; DNA; 26 BP.
AC  AAX81619;
XX
XX  26-AUG-1999 (first entry)
XX
XX  PCR primer used to amplify erythrovirus V9 nucleotide sequences.
DE
XX  Erythrovirus V9; differential diagnosis; parvovirus; infection;
KW  erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
XX  Synthetic.
OS  Erythrovirus.
XX
XX  FR2771751-A1.
PN
XX
XX  04-JUN-1999.
PD
XX
XX  03-DEC-1997; 97FR-00015197.
PF
XX
XX  03-DEC-1997; 97FR-00015197.
PR
XX
XX  (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
PA
XX
XX  Nguyen QT, Garbarg CA, Auguste V;
XX
XX  WPI, 1999-349543/30.
DR
XX
XX  Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT  diagnosis of its infections.
XX
XX  Claim 3; Page 29; 80pp; French.
XX
XX  AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC  polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC  polynucleotide sequences (AAX81580) can be used for differential
CC  diagnosis of erythrovirus (parvovirus) infections by a combination of
CC  amplification and hybridisation assay. The probes can also be used to
CC  assess susceptibility to erythrovirus infection and for erythrovirus
CC  screening and typing. The antibodies can be used in immunoassays for
CC  diagnosis of erythrovirus V9 infections
XX
XX  Sequence 26 BP; 13 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match          0.5%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 9.9;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  4133 AGATTTCGAATGAAAAGACAGCT 4158
    |||||
    1 AGATTTCGAATGAAAAGACAGCT 26

Db

RESULT 16
AAX81598
ID  AAX81598 standard; DNA; 25 BP.
AC  AAX81598;
XX
XX  26-AUG-1999 (first entry)
XX

```

```

XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
DE
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
XX Synthetic.
OS Erythrovirus.
XX
XX FR2771751-A1.
PN
XX
XX 04-JUN-1999.
PD
XX
XX 03-DEC-1997; 97FR-00015197.
PF
XX
XX 03-DEC-1997; 97FR-00015197.
PR
XX
XX (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
PA
XX
XX Nguyen QT, Garbarg CA, Auguste V;
PI
XX
XX WPI; 1999-349543/30.
DR
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT diagnosis of its infections.
XX
XX Claim 3; Page 24; 80pp; French.
PS
XX
XX AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC polynucleotide sequences (AAX81580) can be used for differential
CC diagnosis of erythrovirus (parvovirus) infections by a combination of
CC amplification and hybridisation assay. The probes can also be used to
CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC diagnosis of erythrovirus V9 infections
XX
XX
SQ Sequence 25 BP; 5 A; 11 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1935 TGAACCCCGCGCTAGTAGGCC 1959
DB 1 TGAACCCCGCGCTAGTAGGCC 25

RESULT 17
ACCA3289
ID ACCA3289 standard; DNA; 25 BP.
XX
XX ACCA3289;
AC
XX
XX 27-OCT-2003 (revised)
DT 11-AUG-2003 (first entry)
XX
XX Nucleotide sequence of a capture probe for human parvovirus B19 DNA.
DE
XX
XX Parvovirus detection; probe; ss.
KM
XX
XX B19 virus.
OS
XX
XX WO2003020742-A1.
PN
XX
XX 13-MAR-2003.
PD
XX
XX 30-AUG-2002; 2002WO-US027734.
PF
XX
XX 31-AUG-2001; 2001US-0316691P.
PR
XX
XX (GENP-) GEN-PROBE INC.
PA
XX

```

```

PI Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;
XX WPI; 2003-300859/29.
DR
XX
XX Detecting human parvovirus B19 nucleic acid in biological sample involves
PT carrying out amplification reaction of parvovirus B19 nucleic acid using
XX human parvovirus specific nucleic acid oligomers.
XX
XX Claim 1; Page 43; 54pp; English.
PS
XX
XX The present sequence represents a probe for parvovirus B19 DNA. It is
CC used in the method of the invention. The specification describes a method
CC of detecting human parvovirus B19 nucleic acid in a biological sample.
CC The method comprises amplifying in vitro a portion of human parvovirus
CC B19 nucleic acid, and detecting an amplified product using a labeled
CC detection probe that hybridizes specifically with the amplified product.
CC The method is useful for detecting human parvovirus B19 nucleic acid in
CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)
XX
XX
SQ Sequence 25 BP; 6 A; 10 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2589 GACAGTTATCTGACACCCCGCATTGC 2613
DB 1 GACAGTTATCTGACACCCCGCATTGC 25

RESULT 18
AAX57350
ID AAX57350 standard; DNA; 26 BP.
XX
XX AAX57350;
AC
XX
XX 22-JUL-1999 (first entry)
DT
XX
XX Parvovirus detecting oligonucleotide 3.
DE
XX
XX Detection; viral concentration; blood plasma; serum; PCR sensitivity;
KM extraction; amplification; detection; PCR primer; ss.
XX
XX Synthetic.
OS Parvovirus.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /note= "5'-end modified by FAM group"
FT modified_base 26
FT /*tag= b
FT /note= "3'-end modified by TAMRA group"
XX
XX EP922771-A2.
PN
XX
XX 16-JUN-1999.
PD
XX
XX 03-NOV-1998; 98EP-00120799.
PF
XX
XX 28-NOV-1997; 97DE-01052898.
PR
XX
XX (CENT-) CENTEON PHARMA GMBH.
PA
XX
XX Weimer T, Groener A;
PI
XX
XX WPI; 1999-329400/28.
DR
XX
XX Process to detect high concentrations of virus in blood plasma or serum,
PT by restricting the sensitivity of PCR.
XX
XX Example 1; Page 7; 8pp; German.
XX

```

CC This invention describes a novel method for for detection of high viral
 CC concentrations in blood plasma or serum by restriction of PCR sensitivity
 CC through suboptimal nucleic acid extraction, amplification and detection
 CC conditions. The method described is used to detect high concentrations of
 CC parvovirus in the blood plasma or serum of humans. The method detects
 CC parvovirus DNA with a content in humans of greater than 106 to 107 genome
 CC equivalents

XX Sequence 26 BP; 5 A; 1 C; 10 G; 10 T; 0 U; 0 Other;

SO Query Match 0.5%; Score 24.4; DB 1; Length 26;

Best Local Similarity 96.2%; Pred. No. 17; Indels 0; Gaps 0;

Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1430 TGGTGGTCTGGAGTGAAGCATTTATT 1455
 DB 1 TGGTGGTCTGGAGTGAAGCATTTATT 26

RESULT 19

AAx81601 ID AAX81601 standard; DNA; 24 BP.

XX AAX81601;

XX 26-AUG-1999 (first entry)

XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;

XX erythrovirus screening; typing; immunoassay; PCR primer; ss.

XX Synthetic.

XX Erythrovirus.

XX FR2771751-A1.

XX 04-JUN-1999.

XX 03-DEC-1997; 97FR-00015197.

XX 03-DEC-1997; 97FR-00015197.

XX (ASST-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.

XX Nguyen QT, Garbarg CA, Auguste V;

XX WPI; 1999-349543/30.

XX Erythrovirus V9 and its nucleic acid sequences - can be used in the

XX diagnosis of its infections.

XX Claim 3; Page 25; 80pp; French.

CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81588) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections

XX Sequence 24 BP; 7 A; 1 C; 7 G; 9 T; 0 U; 0 Other;

SO Query Match 0.5%; Score 24; DB 1; Length 24;

Best Local Similarity 100.0%; Pred. No. 16; Indels 0; Gaps 0;

Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2194 GCTTGGTATATGATGATGAATTT 2217

DB 1 GCTTGGTATATGATGATGAATTT 24

RESULT 20

AAx81618 ID AAX81618 standard; DNA; 24 BP.

XX AAX81618;

XX 26-AUG-1999 (first entry)

XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;

XX erythrovirus screening; typing; immunoassay; PCR primer; ss.

XX Synthetic.

XX Erythrovirus.

XX FR2771751-A1.

XX 04-JUN-1999.

XX 03-DEC-1997; 97FR-00015197.

XX 03-DEC-1997; 97FR-00015197.

XX (ASST-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.

XX Nguyen QT, Garbarg CA, Auguste V;

XX WPI; 1999-349543/30.

XX Erythrovirus V9 and its nucleic acid sequences - can be used in the

XX diagnosis of its infections.

XX Claim 3; Page 29; 80pp; French.

CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81588) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections

XX Sequence 24 BP; 10 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

SO Query Match 0.5%; Score 24; DB 1; Length 24;

Best Local Similarity 100.0%; Pred. No. 16; Indels 0; Gaps 0;

Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4106 GACCAAGATATCAGCAGGCGTA 4129

DB 1 GACCAAGATATCAGCAGGCGTA 24

RESULT 21

ACC43287 ID ACC43287 standard; DNA; 25 BP.

XX ACC43287;

XX 27-OCT-2003 (revised)

XX 11-AUG-2003 (first entry)

XX Nucleotide sequence of a PCR primer for human parvovirus B19 DNA.

XX Parvovirus detection; PCR; primer; ss.

XX B19 virus.

XX WO2003020742-A1.

PD 13-MAR-2003.
 XX 30-AUG-2002; 2002MO-US027734.
 XX 31-AUG-2001; 2001US-0316691P.
 XX (GENP-) GEN-PROBE INC.
 XX Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;
 XX WPI; 2003-300859/29.
 DR
 XX
 PT Detecting human parvovirus B19 nucleic acid in biological sample involves
 PT carrying out amplification reaction of parvovirus B19 nucleic acid using
 PT human parvovirus specific nucleic acid oligomers.
 XX
 XX Claim 1; Page 43; 54pp; English.
 XX
 CC The present sequence represents a primer for parvovirus B19 DNA. It is
 CC used in the method of the invention. The specification describes a method
 CC of detecting human parvovirus B19 nucleic acid in a biological sample.
 CC The method comprises amplifying in vitro a portion of human parvovirus
 CC B19 nucleic acid, and detecting an amplified product using a labeled
 CC detection probe that hybridizes specifically with the amplified product.
 CC The method is useful for detecting human parvovirus B19 nucleic acid in
 CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)
 CC
 SQ Sequence 25 BP; 7 A; 7 C; 2 G; 9 T; 0 U; 0 Other;
 Query Match 0.5%; Score 23.4; DB 1; Length 25;
 Best Local Similarity 96.0%; Pred. No. 21;
 Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2551 CTCTCCAGACCTTATATAGTCATCAT 2575
 DB 1 CTCTCCAGACTTATATATAGTCATCAT 25
 RESULT 22
 ACC43309
 ID ACC43309 standard; DNA; 25 BP.
 AC ACC43309;
 XX
 XX 27-OCT-2003 (revised)
 DT 11-AUG-2003 (first entry)
 DE Nucleotide sequence of a probe for human parvovirus B19 DNA.
 XX
 XX Parvovirus detection; probe; ss.
 KM
 XX B19 virus.
 OS
 XX WO2003020742-A1.
 PN
 XX
 PD 13-MAR-2003.
 PD 30-AUG-2002; 2002MO-US027734.
 PF 31-AUG-2001; 2001US-0316691P.
 XX
 XX (GENP-) GEN-PROBE INC.
 XX
 XX Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;
 XX WPI; 2003-300859/29.
 DR
 XX
 PT Detecting human parvovirus B19 nucleic acid in biological sample involves
 PT carrying out amplification reaction of parvovirus B19 nucleic acid using
 PT human parvovirus specific nucleic acid oligomers.
 XX
 XX Claim 1; Page 33; 54pp; English.

CC The present sequence represents a probe for parvovirus B19 DNA. It is
 CC used in the method of the invention. The specification describes a method
 CC of detecting human parvovirus B19 nucleic acid in a biological sample.
 CC The method comprises amplifying in vitro a portion of human parvovirus
 CC B19 nucleic acid, and detecting an amplified product using a labeled
 CC detection probe that hybridizes specifically with the amplified product.
 CC The method is useful for detecting human parvovirus B19 nucleic acid in
 CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)
 CC
 SQ Sequence 25 BP; 7 A; 7 C; 2 G; 9 T; 0 U; 0 Other;
 Query Match 0.5%; Score 23.4; DB 1; Length 25;
 Best Local Similarity 96.0%; Pred. No. 21;
 Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2551 CTCTCCAGACCTTATATAGTCATCAT 2575
 DB 1 CTCTCCAGACTTATATATAGTCATCAT 25
 RESULT 23
 AAX81613
 ID AAX81613 standard; DNA; 23 BP.
 XX
 XX AAX81613;
 AC
 XX
 XX 26-AUG-1999 (first entry)
 DT
 XX
 XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
 DE
 XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
 XX
 XX Synthetic.
 OS
 XX Erythrovirus.
 PN
 XX FR2771751-A1.
 PD
 XX 04-JUN-1999.
 PD
 XX 03-DEC-1997; 97PR-00015197.
 PF
 XX 03-DEC-1997; 97PR-00015197.
 PR
 XX (ASST-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
 PA
 XX Nguyen QT, Garbary CA, Auguste V;
 PI
 XX WPI; 1999-349543/30.
 DR
 XX
 XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.
 PT
 XX
 XX Claim 3; Page 28; 80pp; French.
 PS
 XX AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections
 CC
 SQ Sequence 23 BP; 10 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
 Query Match 0.5%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2990 TACAACGCTCAGAAAAATACCC 3012
 DB 1 TACAACGCTCAGAAAAATACCC 23

```

RESULT 24
AXX81615
ID AAX81615 standard; DNA; 23 BP.
XX
XX
AC AAX81615;
XX
XX
DT 26-AUG-1999 (first entry)
XX
DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
OS Synthetic.
XX Erythrovirus.
XX
PN FR2771751-A1.
XX
PD 04-JUN-1999.
XX
PF 03-DEC-1997; 97FR-00015197.
XX
PR 03-DEC-1997; 97FR-00015197.
XX
PA (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
PI Nguyen QT, Garbarg CA, Auguste V;
XX
DR WPI; 1999-349543/30.
XX
PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT diagnosis of its infections.
XX
XX
PS Claim 3; Page 28; 80pp; French.
XX
CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC polynucleotide sequences (AAX81580) can be used for differential
CC diagnosis of erythrovirus (parvovirus) infections by a combination of
CC amplification and hybridisation assay. The probes can also be used to
CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC diagnosis of erythrovirus V9 infections
XX
SQ Sequence 23 BP; 7 A; 1 C; 2 G; 13 T; 0 U; 0 Other;

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3284 TTAGATTTAATGCTTTAAATTT 3306
DB 1 TTAGATTTAATGCTTTAAATTT 23

RESULT 25
AXX81624
ID AAX81624 standard; DNA; 23 BP.
XX
XX
AC AAX81624;
XX
XX
DT 26-AUG-1999 (first entry)
XX
DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
OS Synthetic.
XX Erythrovirus.
XX

```

```

PN FR2771751-A1.
XX
XX
PD 04-JUN-1999.
XX
XX
PF 03-DEC-1997; 97FR-00015197.
XX
XX
PR 03-DEC-1997; 97FR-00015197.
XX
XX
PA (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
PI Nguyen QT, Garbarg CA, Auguste V;
XX
DR WPI; 1999-349543/30.
XX
PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT diagnosis of its infections.
XX
XX
PS Claim 3; Page 30; 80pp; French.
XX
CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC polynucleotide sequences (AAX81580) can be used for differential
CC diagnosis of erythrovirus (parvovirus) infections by a combination of
CC amplification and hybridisation assay. The probes can also be used to
CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC diagnosis of erythrovirus V9 infections
XX
SQ Sequence 23 BP; 7 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.5%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4433 ATGGGAATTACTACTTACTTCA 4455
DB 1 ATGGGAATTACTACTTACTTCA 23

RESULT 26
AXX81621
ID AAX81621 standard; DNA; 23 BP.
XX
XX
AC AAX81621;
XX
XX
DT 26-AUG-1999 (first entry)
XX
DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
OS Synthetic.
XX Erythrovirus.
XX
PN FR2771751-A1.
XX
PD 04-JUN-1999.
XX
PF 03-DEC-1997; 97FR-00015197.
XX
PR 03-DEC-1997; 97FR-00015197.
XX
XX
PA (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
PI Nguyen QT, Garbarg CA, Auguste V;
XX
DR WPI; 1999-349543/30.
XX
PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT diagnosis of its infections.
XX
XX
PS Claim 3; Page 29; 80pp; French.
XX

```

XX AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections

XX Sequence 23 BP, 9 A; 3 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 20;

Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4313 TTATGATGACGCTTTAAACTCA 4335
 DB 1 TTATGATGACGCTTTAAACTCA 23

RESULT 27

AAX81588 standard; DNA; 23 BP.

AC AAX81588;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;

KW erythrovirus screening; typing; immunoassay; PCR primer; ss.

OS Synthetic.

XX Erythrovirus.

PN FR2771751-A1.

PD 04-JUN-1999.

PF 03-DEC-1997; 97FR-00015197.

PR 03-DEC-1997; 97FR-00015197.

PA (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.

PI Nguyen QT, Garbarg CA, Auguste V;

DR WPI; 1999-349543/30.

PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.

PS Claim 3; Page 22; 80pp; French.

CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections

XX Sequence 23 BP, 7 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 20;

Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 418 ACTTCTGACTGGAGACCACTAAC 440

|||||

Db 1 ACTTCTGACTGGAGACCACTAAC 23

RESULT 28

AAX81596 standard; DNA; 23 BP.

AC AAX81596;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;

KW erythrovirus screening; typing; immunoassay; PCR primer; ss.

OS Synthetic.

XX Erythrovirus.

PN FR2771751-A1.

PD 04-JUN-1999.

PF 03-DEC-1997; 97FR-00015197.

PR 03-DEC-1997; 97FR-00015197.

PA (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.

PI Nguyen QT, Garbarg CA, Auguste V;

DR WPI; 1999-349543/30.

PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.

PS Claim 3; Page 24; 80pp; French.

CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections

XX Sequence 23 BP, 7 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 20;

Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1795 AATGAGATGCCCTCCACCCAGA 1817

DB 1 AATGAGATGCCCTCCACCCAGA 23

RESULT 29

AAX81611 standard; DNA; 23 BP.

AC AAX81611;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;

KW erythrovirus screening; typing; immunoassay; PCR primer; ss.

OS Synthetic.

XX Erythrovirus.

```

XX FR2771751-A1.
XX
XX 04-JUN-1999.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
XX Nguyen QT, Garbarg CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.
XX
XX Claim 3; Page 27; 80pp; French.
XX
XX AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
XX polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX polynucleotide sequences (AAX81580) can be used for differential
XX diagnosis of erythrovirus (parvovirus) infections by a combination of
XX amplification and hybridisation assay. The probes can also be used to
XX assess susceptibility to erythrovirus infection and for erythrovirus
XX screening and typing. The antibodies can be used in immunoassays for
XX diagnosis of erythrovirus V9 infections
XX
XX Sequence 23 BP; 16 A; 1 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 23; DB 1; Length 23;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2870 TTTAAAAATTTAAAAATGAAAC 2892
XX 1 TTTAAAAATTTAAAAATGAAAC 23
XX
XX DB
XX
XX RESULT 30
XX AAX81651
XX ID AAX81651 standard; DNA; 23 BP.
XX
XX AAX81651;
XX
XX 26-AUG-1999 (first entry)
XX
XX Probe used to isolate erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX erythrovirus screening; typing; immunoassay; probe; ss.
XX
XX Synthetic.
XX Erythrovirus.
XX
XX FR2771751-A1.
XX
XX 04-JUN-1999.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
XX Nguyen QT, Garbarg CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.
XX

```

```

PS Claim 3; Page 38; 80pp; French.
XX
XX AAX81630-X81666 represent probes used to isolate erythrovirus V9
XX polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX polynucleotide sequences (AAX81580) can be used for differential
XX diagnosis of erythrovirus (parvovirus) infections by a combination of
XX amplification and hybridisation assay. The probes can also be used to
XX assess susceptibility to erythrovirus infection and for erythrovirus
XX screening and typing. The antibodies can be used in immunoassays for
XX diagnosis of erythrovirus V9 infections
XX
XX Sequence 23 BP; 7 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 23; DB 1; Length 23;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2574 ATTTTCAGAGCCATGACAGTTA 2596
XX 1 ATTTTCAGAGCCATGACAGTTA 23
XX
XX DB
XX
XX RESULT 31
XX ABZ59580
XX ID ABZ59580 standard; DNA; 24 BP.
XX
XX ABZ59580;
XX
XX 22-APR-2003 (first entry)
XX
XX Human parvovirus B19 VP2 PCR primer VP2-5 SEQ ID NO:38.
XX
XX Human parvovirus B19; parvovirus B19; infection; virus; blood; plasma;
XX PCR primer; ss.
XX
XX B19 virus.
XX Synthetic.
XX
XX WO2003002753-A2.
XX
XX 09-JAN-2003.
XX
XX 28-JUN-2002; 2002W0-US020684.
XX
XX 28-JUN-2001; 2001US-0302077P.
XX
XX 19-MAR-2002; 2002US-0365956P.
XX
XX 29-MAR-2002; 2002US-0369224P.
XX
XX (CHIR ) CHIRON CORP.
XX
XX Pichuanes S, Shyamala V;
XX
XX WPI; 2003-201510/19.
XX
XX Detecting a human parvovirus B19 infection in a biological sample to
XX prevent viral transmission, comprises reacting a parvovirus B19 nucleic
XX acid with a primer complementary to the 3'-terminal portion of the RNA
XX target sequence.
XX
XX Example 2; Page 42; 148pp; English.
XX
XX The present invention describes a method for detecting a human parvovirus
XX B19 infection in a biological sample. The method comprises reacting the
XX isolated parvovirus B19 nucleic acid with a first oligonucleotide
XX consisting of a first primer containing a complexing sequence
XX sufficiently complementary to the 3'-terminal portion of the RNA target
XX sequence to complex with. Also described: (1) amplifying a target
XX parvovirus B19 nucleotide sequence; (2) a polynucleotide comprising one
XX of 47 700 base pair sequences (see ABZ59549 to ABZ59569, and ABZ59604 to
XX ABZ59629); (3) a polynucleotide comprising either of 2 4678 base pair
XX sequences (see ABZ59570 and ABZ59571); (4) an oligonucleotide primer
XX consisting of a promoter region recognised by a DNA-dependent RNA
XX polymerase operably linked to a human parvovirus B19-specific complexing
XX

```


CC sequence of 10-75 nucleotides; (5) an oligonucleotide probe comprising a
 CC parvovirus B19-specific hybridizing sequence of 10-50 nucleotides linked
 CC to an acridinium ester label; and (6) a diagnostic test kit comprising an
 CC oligonucleotide primer of (4), and instructions for conducting the
 CC diagnostic test. The method is useful for detecting parvovirus infection
 CC in a biological sample, such as in blood products, to prevent
 CC transmission of the virus through blood and plasma derivatives or by
 CC close personal contact. AB259549 to AB259634 and ABP57262 to ABP57267
 CC represent sequences used in the exemplification of the present invention
 XX
 SQ Sequence 24 BP, 10 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 22.4; DB 1; Length 24;
 Best Local Similarity 95.8%; Pred. No. 27;
 Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4620 GACACCGATATGAAAAGCCTGAAG 4643
 DB 1 GACATGATATGAAAAGCCTGAAG 24

RESULT 32

AAx81650
 ID AAX81650 standard; DNA; 22 BP.

AC AAX81650;

DT 26-AUG-1999 (first entry)

DE Probe used to isolate erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KW erythrovirus screening; typing; immunoassay; probe; ss.

OS Synthetic.
 OS Erythrovirus.

PN FR2771751-A1.

PD 04-JUN-1999.

PF 03-DEC-1997; 97FR-00015197.

PR 03-DEC-1997; 97FR-00015197.

PA (ASST-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.

PI Nguyen QT, Garbary CA, Auguste V;

DR WPI; 1999-349543/30.

PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.

PS Claim 3; Page 37; 80pp; French.

CC AAX81630-X8166 represent probes used to isolate erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections

XX Sequence 22 BP, 6 A; 7 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 22; DB 1; Length 22;
 Best Local Similarity 100.0%; Pred. No. 25;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2552 TCTCCAGACCTATATAGTCATC 2573
 ||||||||||||||||||||

DB 1 TCTCCAGACCTATATAGTCATC 22

RESULT 33

AAx81610
 ID AAX81610 standard; DNA; 22 BP.

AC AAX81610;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KW erythrovirus screening; typing; immunoassay; PCR primer; ss.

OS Synthetic.
 OS Erythrovirus.

PN FR2771751-A1.

PD 04-JUN-1999.

PF 03-DEC-1997; 97FR-00015197.

PR 03-DEC-1997; 97FR-00015197.

PA (ASST-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.

PI Nguyen QT, Garbary CA, Auguste V;

DR WPI; 1999-349543/30.

PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.

PS Claim 3; Page 27; 80pp; French.

CC AAX81580-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections

XX Sequence 22 BP, 7 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 22; DB 1; Length 22;
 Best Local Similarity 100.0%; Pred. No. 25;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2814 TGGCTAGTTGGGAATTAATCC 2835
 DB 1 TGGCTAGTTGGGAATTAATCC 22

RESULT 34
 AAH03067
 ID AAH03067 standard; DNA; 22 BP.

AC AAH03067;

DT 15-JUN-2001 (first entry)

DE Microorganism detection method related oligonucleotide SEQ ID NO: 91.

XX Microorganism identification; pathogen; DNA sequencing; HLA type;
 KW bi-directional sequencing; infection; mutation detection; PCR primer; ss.

XX Unidentified.

PN US6214555-B1.
 XX
 PD 10-APR-2001.
 XX
 PF 13-MAY-1999; 99US-00311260.
 XX
 PR 01-MAY-1996; 96US-00640672.
 PR 19-JUL-1996; 96US-00684498.
 PR 27-FEB-1997; 97US-00807138.
 PR 20-JAN-1998; 98US-00009483.
 XX
 PA (VIST-) VISIBLE GENETICS INC.
 XX
 PI Leushner J, Hui M, Dunn JM, Lacroix J;
 XX
 DR WPI; 2001-289718/30.
 XX
 XX
 PT Composition for detecting microorganisms, comprising deoxynucleotide
 PT triphosphates, dideoxynucleotide triphosphate, and thermostable
 PT polymerase to incorporate dideoxynucleotide triphosphate into extending
 PT polymer.
 XX
 PS Disclosure; Col 67; 62pp; English.
 XX
 CC The present invention provides a composition containing 4 dNTPs and at
 CC least one ddNTP and a thermally stable polymerase which incorporates
 CC ddNTPs into an extending nucleic acid polymer at a rate of not less than
 CC 0.4 times the rate of dNTP incorporation. This can be used with the PCR
 CC primers provided in the invention to detect the presence of
 CC microorganisms, such as Chlamydia trachomatis, HIV or human
 CC papillomavirus, in a sample. In addition, it can be used to detect
 CC mutations in a specific gene, to determine HLA type, and to produce
 CC sequencing fragments for further study
 XX
 SQ Sequence 22 BP; 7 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
 XX
 Query Match 0.4%; Score 22; DB 1; Length 22;
 Best Local Similarity 100.0%; Pred. No. 25;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2429 GGACGACTTACGCTTATTC 2450
 DB 1 GGACGACTTACGCTTATTC 22
 XX
 RESULT 35
 AAF75351
 ID AAF75351 standard; DNA; 22 BP.
 XX
 AC AAF75351;
 XX
 DT 11-SEP-2003 (revised)
 DT 11-MAY-2001 (first entry)
 XX
 DE Parvovirus B19 PCR primer P1.f.
 XX
 KM Parvovirus B19; quality assurance; nucleic acid amplification;
 KM microorganism detection; contamination identification; PCR primer; ss.
 XX
 OS B19 virus.
 OS
 PN WO200114593-A2.
 XX
 PD 01-MAR-2001.
 XX
 PF 14-AUG-2000; 2000WO-EP007892.
 XX
 PR 20-AUG-1999; 99AT-00001443.
 XX
 PA (BAKT) BAXTER AG.
 XX
 PI Zerlauch G, Gessner M, Koettnitz K, Gross F;
 XX

DR WPI; 2001-218460/22.
 XX
 XX
 PT Producing a pool of biological samples that is quality assured with
 PT regard to the load of microorganisms, especially viruses, comprises
 PT employing two nucleic acid amplification processes that differ in their
 PT sensitivity.
 XX
 PS Example; Page 13; 19pp; English.
 XX
 CC The present sequence was used in a method for producing a pool of
 CC biological samples that is quality assured with respect to the load of
 CC microorganisms, especially viruses. The method comprises testing a
 CC screening pool with a high sensitivity nucleic acid amplification method
 CC and dividing the pool into subpools, which are tested with a less
 CC sensitive nucleic acid amplification method. Individual samples are then
 CC picked out and eliminated. The method enables a reliable identification
 CC of contaminated individual samples, especially highly contaminated
 CC individual samples, as well as adherence to certain limit values for such
 CC contaminants in the pool. The method is also less expensive and is
 CC simpler to use than other known pool testing methods. (updated on 11-SEP-
 CC 2003 to standardise OS field)
 XX
 SQ Sequence 22 BP; 6 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 0.4%; Score 22; DB 1; Length 22;
 Best Local Similarity 100.0%; Pred. No. 25;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2589 GACGATTATTCACCCGCCA 2610
 DB 1 GACGATTATTCACCCGCCA 22
 XX
 RESULT 36
 ACC43300
 ID ACC43300 standard; DNA; 22 BP.
 XX
 AC ACC43300;
 XX
 DT 27-OCT-2003 (revised)
 DT 11-AUG-2003 (first entry)
 XX
 DE Nucleotide sequence of a probe for human parvovirus B19 DNA.
 XX
 KM Parvovirus detection; probe; ss.
 KM
 OS B19 virus.
 OS
 PN WO2003020742-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 30-AUG-2002; 2002WO-US027734.
 XX
 PR 31-AUG-2001; 2001US-0316691P.
 XX
 PA (GENP-) GEN-PROBE INC.
 XX
 PI Brenano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolik DP;
 XX
 DR WPI; 2003-300859/29.
 XX
 PT Detecting human parvovirus B19 nucleic acid in biological sample involves
 PT carrying out amplification reaction of parvovirus B19 nucleic acid using
 PT human parvovirus specific nucleic acid oligomers.
 XX
 PS Claim 1; Page 33; 54pp; English.
 XX
 CC The present sequence represents a probe for parvovirus B19 DNA. It is
 CC used in the method of the invention. The specification describes a method
 CC of detecting human parvovirus B19 nucleic acid in a biological sample.
 CC The method comprises amplifying in vitro a portion of human parvovirus
 CC B19 nucleic acid, and detecting an amplified product using a labeled

CC detection probe that hybridizes specifically with the amplified product.
CC The method is useful for detecting human parvovirus B19 nucleic acid in
CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)

XX Sequence 22 BP; 7 A; 3 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 22; DB 1; Length 22;

Best Local Similarity 100.0%; Pred. No. 25;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2660 GTATTATCTAGTGAAGACTTAC 2681

DB 1 GTATTATCTAGTGAAGACTTAC 22

RESULT 37

ACC43290
ID ACC43290 standard; DNA; 22 BP.

XX ACC43290;

AC 27-OCT-2003 (revised)

DT 11-AUG-2003 (first entry)

DE Nucleotide sequence of a capture probe for human parvovirus B19 DNA.

XX Parvovirus detection; probe; ss.

XX B19 virus.

XX MO2003020742-A1.

XX 13-MAR-2003.

XX 30-AUG-2002; 2002MO-US027734.

XX 31-AUG-2001; 2001US-0316691P.

XX (GENP-) GEN-PROBE INC.

XX Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;

XX WPI; 2003-300859/29.

XX Detecting human parvovirus B19 nucleic acid in biological sample involves
XX carrying out amplification reaction of parvovirus B19 nucleic acid using
XX human parvovirus specific nucleic acid oligomers.

XX Claim 1; Page 43; 54pp; English.

XX The present sequence represents a probe for parvovirus B19 DNA. It is
XX used in the method of the invention. The specification describes a method
XX of detecting human parvovirus B19 nucleic acid in a biological sample.
XX The method comprises amplifying in vitro a portion of human parvovirus
XX B19 nucleic acid, and detecting an amplified product using a labeled
XX detection probe that hybridizes specifically with the amplified product.
XX The method is useful for detecting human parvovirus B19 nucleic acid in
XX biological samples. (Updated on 27-OCT-2003 to standardise OS field)

XX Sequence 22 BP; 6 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 22; DB 1; Length 22;

Best Local Similarity 100.0%; Pred. No. 25;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2585 CARGACAGTTATCTGACGACC 2606

DB 1 CARGACAGTTATCTGACGACC 22

RESULT 38

ID ADA27491 standard; DNA; 22 BP.

XX ADA27491;
AC 20-NOV-2003 (first entry)

XX Microorganism sequencing primer #91.

XX microorganism detection; bi-directional DNA sequencing;
XX HLA determination; human leukocyte antigen; reduced error risk;
XX reduced contamination risk; sequencing; primer; ss.

XX B19 virus.

XX US2003082535-A1.

XX 01-MAY-2003.

XX 07-MAR-2001; 2001US-00802110.

XX 01-MAY-1996; 96US-00640672.

XX 19-JUL-1996; 96US-00684498.

XX 27-FEB-1997; 97US-00807138.

XX 29-APR-1997; 97MO-US007134.

XX 20-JAN-1998; 98US-00009483.

XX 13-MAY-1999; 99US-00311260.

XX (LEUS/) LEUSHNER J.

XX (HUIM/) HUI M.

XX (DUNN/) DUNN J M.

XX (LACR/) LACROIX J.

XX Leushner J, Hui M, Dunn JM, Lacroix J;

XX WPI; 2003-576607/54.

XX Microorganism detecting composition comprises dideoxynucleotide
XX triphosphate(s) corresponding to one of four dideoxynucleotide
XX triphosphate, and thermally stable polymerase enzyme.
XX Disclosure; Page 21; 94pp; English.

XX The invention relates to a microorganism detecting composition. The
XX composition is used for detecting a target microorganism. It is used in a
XX bi-directional DNA sequencing method in several contexts including
XX detection of mutations, particularly mutations of medical significance,
XX in samples derived from a human patient, animal, plant, or microorganism;
XX determination of HLA (human leukocyte antigen) type ancillary to
XX transplant procedures; detection and identification of microorganisms,
XX particularly pathogenic microorganisms, in a sample and in situ
XX sequencing reactions to produce sequencing fragments within a
XX histological specimen which are then removed from a selected location on
XX the tissue preparation and loaded onto a gel for sequence analysis. The
XX invention allows an evaluation to be directly performed on a natural
XX abundance DNA sample. It provides for bi-directional sequencing of DNA
XX which requires combining a complex DNA-containing sample with only a
XX single reaction mixture, thus reducing risk of error and contamination,
XX and increasing the ease with which the procedure can be automated. The
XX present sequence represents a sequencing primer for identification of a
XX microorganism.

XX Sequence 22 BP; 7 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 22; DB 1; Length 22;

Best Local Similarity 100.0%; Pred. No. 25;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2429 GGAACAGACTTAGAGCTTATTC 2450

DB 1 GGAACAGACTTAGAGCTTATTC 22

RESULT 39

AAAS3613

```

ID   AAA53613 standard; DNA; 23 BP.
XX
AC   AAA53613;
XX
DT   15-SEP-2003 (revised)
DT   04-DEC-2000 (first entry)
XX
DE   B19-reverse primer for parvovirus B19 genomic DNA amplification.
XX
KM   TTV: TTV virus; blood transmission; detection; amplification; primer;
XX   transplantation; xenotransplantation; vector; ss.
XX
OS   B19 virus.
XX
PN   WO200046407-A2.
XX
PD   10-AUG-2000.
XX
PF   04-FEB-2000; 2000WO-US002982.
XX
PR   05-FEB-1999; 99US-00245248.
XX
PS   (ABBO ) ABBOTT LAB.
XX
PI   Leary TP, Simons JM, Erker JC, Chalmers ML, Birkenmeyer LG;
PI   Muerthoff AS, Pilot-Matias TU, Desai SM, Mushahwar IK;
XX
DR   WPI; 2000-514969/46.
XX
PT   New oligomer primer useful for the detection of TTV virus in test samples
PT   and tissues and organs for use in (xeno)transplantation.
XX
PS   Example 2; Page 103; 139pp; English.
XX
CC   Filtration studies to determine the approximate size of TTV virus (TTV)
CC   virion were carried out using parvovirus B19-containing human serum as a
CC   comparison. Primers were used to detect the presence of the viruses in
CC   resulting filtrates. The TTV virions appear to exist in serum with a
CC   particle diameter between 30 and 50 nm. The TTV (3729 bp) was isolated
CC   from serum of a Japanese patient with cryptogenic hepatitis. The genome
CC   is circular and single-stranded. TTV DNA can be transmitted by blood or
CC   blood products. It is also possible that TTV is transmitted by a faecal-
CC   oral route, demonstrated by the presence of TTV in the faeces of infected
CC   humans. Detection of TTV in test samples can be enhanced by use of DNA
CC   amplification assays that use DNA oligomers as primers. The primers are
CC   useful for detecting the presence of TTV target nucleotides in biological
CC   samples and tissues and organs to be used in transplantation and
CC   xenotransplantation (claimed). The TTV genome itself can be used as a
CC   vector in order to introduce heterologous DNA into a host cell. (Updated
CC   on 15-SEP-2003 to standardise OS field)
XX
SQ   Sequence 23 BP; 6 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
Query Match      0.4%; Score 21.4; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 34;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY   3015 GCATGACTTCAGTTACTCGCA 3037
DB   1 GCATGACTTCAGTTACTCGCA 23

RESULT 40
AAx81672/c
ID   AAx81672 standard; DNA; 21 BP.
XX
AC   AAx81672;
XX
DT   26-AUG-1999 (first entry)
XX
DE   Probe used to isolate erythrovirus V9 nucleotide sequences.
XX
KM   Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX

```

```

KM   erythrovirus screening; typing; immunoassay; probe; ss.
XX
OS   Synthetic.
OS   Erythrovirus.
XX
PN   FR2771751-A1.
XX
PD   04-JUN-1999.
XX
PF   03-DEC-1997; 97FR-00015197.
XX
PR   03-DEC-1997; 97FR-00015197.
XX
PS   (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
PI   Nguyen QT, Garbarg CA, Auguste V;
XX
DR   WPI; 1999-349543/30.
XX
PT   Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT   diagnosis of its infections.
XX
PS   Claim 3; Page 64; 80pp; French.
XX
CC   The present probe was used to isolate erythrovirus V9 polynucleotide
CC   sequences. Probes and primers derived from erythrovirus V9 polynucleotide
CC   sequences (AAx81580) can be used for differential diagnosis of
CC   erythrovirus (parvovirus) infections by a combination of amplification
CC   and hybridisation assay. The probes can also be used to assess
CC   susceptibility to erythrovirus infection and for erythrovirus screening
CC   and typing. The antibodies can be used in immunoassays for diagnosis of
CC   erythrovirus V9 infections
XX
SQ   Sequence 21 BP; 7 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
Query Match      0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY   2041 TTTTACAGCGCGCTGGCGAT 2061
DB   21 TTTTACAGCGCGCTGGCGAT 1

RESULT 41
AAx81622
ID   AAx81622 standard; DNA; 21 BP.
XX
AC   AAx81622;
XX
DT   26-AUG-1999 (first entry)
XX
DE   PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
KM   Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX   erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
OS   Synthetic.
OS   Erythrovirus.
XX
PN   FR2771751-A1.
XX
PD   04-JUN-1999.
XX
PF   03-DEC-1997; 97FR-00015197.
XX
PR   03-DEC-1997; 97FR-00015197.
XX
PS   (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
PI   Nguyen QT, Garbarg CA, Auguste V;
XX
DR   WPI; 1999-349543/30.
XX

```

XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT diagnosis of its infections.

XX Claim 3; Page 30; 80pp; French.

CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC polynucleotide sequences (AAX81580) can be used for differential
CC diagnosis of erythrovirus (parvovirus) infections by a combination of
CC amplification and hybridisation assay. The probes can also be used to
CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC diagnosis of erythrovirus V9 infections

XX Sequence 21 BP; 10 A; 3 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4376 CCTCAAAATTTTAAATA 4396
DB 1 CCTCAAAATTTTAAATA 21

RESULT 42
AAX81593

ID AAX81593 standard; DNA; 21 BP.

AC AAX81593;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;

KW erythrovirus screening; typing; immunoassay; PCR primer; ss.

XX Synthetic.

OS Erythrovirus.

PN FR2771751-A1.

PD 04-JUN-1999.

PF 03-DEC-1997; 97FR-00015197.

PR 03-DEC-1997; 97FR-00015197.

PA (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.

PI Nguyen QT, Garbary CA, Auguste V;

DR WPI; 1999-349543/30.

PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT diagnosis of its infections.

XX Claim 3; Page 23; 80pp; French.

CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC polynucleotide sequences (AAX81580) can be used for differential
CC diagnosis of erythrovirus (parvovirus) infections by a combination of
CC amplification and hybridisation assay. The probes can also be used to
CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC diagnosis of erythrovirus V9 infections

XX Sequence 21 BP; 6 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 30;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1723 TGGTGAATGACAAAGCTGG 1743
DB 1 TGGTGAATGACAAAGCTGG 21

RESULT 43

ID AAX81668/c

AC AAX81668;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;

KW erythrovirus screening; typing; immunoassay; PCR primer; ss.

XX Synthetic.

PN FR2771751-A1.

PD 04-JUN-1999.

PF 03-DEC-1997; 97FR-00015197.

PR 03-DEC-1997; 97FR-00015197.

PA (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.

PI Nguyen QT, Garbary CA, Auguste V;

DR WPI; 1999-349543/30.

PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
PT diagnosis of its infections.

XX Claim 3; Page 63; 80pp; French.

CC The present PCR primer is used to amplify erythrovirus V9 polynucleotide
CC sequences. Probes and primers derived from erythrovirus V9 polynucleotide
CC sequences (AAX81580) can be used for differential diagnosis of
CC erythrovirus (parvovirus) infections by a combination of amplification
CC and hybridisation assay. The probes can also be used to assess
CC susceptibility to erythrovirus infection and for erythrovirus screening
CC and typing. The antibodies can be used in immunoassays for diagnosis of
CC erythrovirus V9 infections

XX Sequence 21 BP; 2 A; 6 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1879 GAAGAACTCAGTGAAGCAGC 1899
DB 21 GAAGAACTCAGTGAAGCAGC 1

RESULT 44

ID AAX81628

AC AAX81628;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

KW Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
 XX
 OS Synthetic.
 OS Erythrovirus.
 XX
 PN FR2771751-A1.
 XX
 PD 04-JUN-1999.
 XX
 PF 03-DEC-1997; 97FR-00015197.
 XX
 PR 03-DEC-1997; 97FR-00015197.
 XX
 PA (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
 XX
 PI Nguyen QT, Garbarg CA, Auguste V;
 XX
 DR WPI; 1999-349543/30.
 XX
 PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.
 XX
 PS Claim 3; Page 31; 80pp; French.
 XX
 PS AX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections
 XX
 SQ Sequence 21 BP; 3 A; 11 C; 3 G; 4 T; 0 U; 0 Other;
 XX
 QY Query Match 0.4%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 4686 TCCCCACCGTGTCTCTCAGCCA 4706
 1 TCCCCACCGTGTCTCTCAGCCA 21
 XX
 RESULT 45
 AAH03068/c
 ID AAH03068 standard; DNA; 21 BP.
 XX
 AC AAH03068;
 XX
 DT 15-JUN-2001 (first entry)
 XX
 DE Microorganism detection method related oligonucleotide SEQ ID NO: 92.
 XX
 KM Microorganism identification; pathogen; DNA sequencing; HLA type;
 KM bi-directional sequencing; infection; mutation detection; PCR primer; ss.
 XX
 OS Unidentified.
 OS
 XX
 PN US6214555-B1.
 XX
 PD 10-APR-2001.
 XX
 PF 13-MAY-1999; 99US-00311260.
 XX
 PR 01-MAY-1996; 96US-00640672.
 PR 19-JUL-1996; 96US-00684498.
 PR 27-FEB-1997; 97US-00807138.
 PR 20-JAN-1998; 98US-00009483.
 XX
 PA (VIST-) VISIBLE GENETICS INC.
 XX

PI Leusner J, Hui M, Dunn JM, Lacroix J;
 XX
 DR WPI; 2001-289718/30.
 XX
 PT Composition for detecting microorganisms, comprising deoxynucleotide
 PT triphosphates, dideoxynucleotide triphosphate, and thermostable
 PT polymerase to incorporate dideoxynucleotide triphosphate into extending
 PT polymer.
 XX
 PS Disclosure; Col 67; 62pp; English.
 XX
 CC The present invention provides a composition containing 4 dNTPs and at
 CC least one dNTP and a thermally stable polymerase which incorporates
 CC dNTPs into an extending nucleic acid polymer at a rate of not less than
 CC 0.4 times the rate of dNTP incorporation. This can be used with the PCR
 CC primers provided in the invention to detect the presence of
 CC microorganisms, such as Chlamydia trachomatis, HIV or human
 CC papillomavirus, in a sample. In addition, it can be used to detect
 CC mutations in a specific gene, to determine HLA type, and to produce
 CC sequencing fragments for further study
 XX
 SQ Sequence 21 BP; 4 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
 XX
 QY Query Match 0.4%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 2667 CTAGTGAGACCTTACACAGC 2687
 21 CTAGTGAGACCTTACACAGC 1
 XX
 RESULT 46
 ACC43302
 ID ACC43302 standard; DNA; 21 BP.
 XX
 AC ACC43302;
 XX
 DT 27-OCT-2003 (revised)
 DT 11-AUG-2003 (first entry)
 XX
 DE Nucleotide sequence of a probe for human parvovirus B19 DNA.
 XX
 KM Parvovirus detection; probe; ss.
 XX
 OS B19 virus.
 OS
 XX
 PN WO2003020742-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 30-AUG-2002; 2002WO-US027734.
 XX
 PR 31-AUG-2001; 2001US-0316691P.
 XX
 PA (GENP-) GEN-PROBE INC.
 XX
 PI Brenano ST, Batranina-Kaminsky M, Hasselkus-light CS, Kolk DP;
 XX
 DR WPI; 2003-300859/29.
 XX
 PT Detecting human parvovirus B19 nucleic acid in biological sample involves
 PT carrying out amplification reaction of parvovirus B19 nucleic acid using
 PT human parvovirus specific nucleic acid oligomers.
 XX
 PS Claim 1; Page 33; 54pp; English.
 XX
 CC The present sequence represents a probe for parvovirus B19 DNA. It is
 CC used in the method of the invention. The specification describes a method
 CC of detecting human parvovirus B19 nucleic acid in a biological sample.
 CC The method comprises amplifying in vitro a portion of human parvovirus
 CC B19 nucleic acid, and detecting an amplified product using a labeled
 CC detection probe that hybridizes specifically with the amplified product.

CC The method is useful for detecting human parvovirus B19 nucleic acid in
 CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)
 XX
 XX Sequence 21 BP; 8 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2667 CTGAGAGCTTACACAGC 2687
 DB 1 CTGAGAGCTTACACAGC 21

RESULT 47
 ACC43303
 ID ACC43303 standard; DNA; 21 BP.

AC ACC43303;
 XX 27-OCT-2003 (revised)
 DT 11-AUG-2003 (first entry)

DE Nucleotide sequence of a probe for human parvovirus B19 DNA.

KM Parvovirus detection; probe; ss.

OS B19 virus.

PN WO2003020742-A1.

PD 13-MAR-2003.

XX 30-AUG-2002; 2002WO-US027734.

PR 31-AUG-2001; 2001US-0316691P.

XX (GENP-) GEN-PROBE INC.

PI Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;

DR WPI; 2003-300859/29.

XX Detecting human parvovirus B19 nucleic acid in biological sample involves
 PT carrying out amplification reaction of parvovirus B19 nucleic acid using
 PT human parvovirus specific nucleic acid oligomers.

PS Claim 1; Page 33; 54pp; English.

CC The present sequence represents a probe for parvovirus B19 DNA. It is
 CC used in the method of the invention. The specification describes a method
 CC of detecting human parvovirus B19 nucleic acid in a biological sample.
 CC The method comprises amplifying in vitro a portion of human parvovirus
 CC B19 nucleic acid, and detecting an amplified product using a labeled
 CC detection probe that hybridizes specifically with the amplified product.
 CC The method is useful for detecting human parvovirus B19 nucleic acid in
 CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)

SQ Sequence 21 BP; 7 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2670 GTGAGAGCTTACACAGCCTG 2690
 DB 1 GTGAGAGCTTACACAGCCTG 21

RESULT 48
 ACC43304
 ID ACC43304 standard; DNA; 21 BP.

AC ACC43304;
 XX 27-OCT-2003 (revised)
 DT 11-AUG-2003 (first entry)

DE Nucleotide sequence of a probe for human parvovirus B19 DNA.
 KM Parvovirus detection; probe; ss.

OS B19 virus.
 PN WO2003020742-A1.

PD 13-MAR-2003.
 PF 30-AUG-2002; 2002WO-US027734.

XX 31-AUG-2001; 2001US-0316691P.
 XX (GENP-) GEN-PROBE INC.

PI Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;

DR WPI; 2003-300859/29.

PT Detecting human parvovirus B19 nucleic acid in biological sample involves
 PT carrying out amplification reaction of parvovirus B19 nucleic acid using
 PT human parvovirus specific nucleic acid oligomers.

PS Claim 1; Page 33; 54pp; English.

CC The present sequence represents a probe for parvovirus B19 DNA. It is
 CC used in the method of the invention. The specification describes a method
 CC of detecting human parvovirus B19 nucleic acid in a biological sample.
 CC The method comprises amplifying in vitro a portion of human parvovirus
 CC B19 nucleic acid, and detecting an amplified product using a labeled
 CC detection probe that hybridizes specifically with the amplified product.
 CC The method is useful for detecting human parvovirus B19 nucleic acid in
 CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)

SQ Sequence 21 BP; 7 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 30;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2657 GCAGTATTATCTAGTGAAGAC 2677
 DB 1 GCAGTATTATCTAGTGAAGAC 21

RESULT 49
 ADA27492/c
 ID ADA27492 standard; DNA; 21 BP.

XX ADA27492;

DT 20-NOV-2003 (first entry)

DE Microorganism sequencing primer #92.

KM microorganism detection; bi-directional DNA sequencing;
 KW HLA determination; human leukocyte antigen; reduced error risk;
 KW reduced contamination risk; sequencing; primer; ss.

OS B19 virus.

PN US2003082535-A1.

PD 01-MAY-2003.

PF 07-MAR-2001; 2001US-00802110.

```

PR 01-MAY-1996; 96US-00640672.
PR 19-JUL-1996; 96US-00684498.
PR 27-FEB-1997; 97US-00807138.
PR 29-APR-1997; 97MO-US007134.
PR 20-JAN-1998; 98US-00009483.
PR 13-MAY-1999; 99US-00311260.
XX
PA (LEUS/) LEUSHNER J.
PA (HUTM/) HUI M.
PA (DUNN/) DUNN J M.
PA (LACR/) LACROIX J.
PI Leushner J, Hui M, Dunn JM, Lacroix J;
XX
XX WPI; 2003-576607/54.
XX
PT Microorganism detecting composition comprises dideoxynucleotide
PT triphosphate(s) corresponding to one of four deoxynucleotide
PT triphosphate, and thermally stable polymerase enzyme.
XX
PS Disclosure; Page 21; 94pp; English.
XX
XX The invention relates to a microorganism detecting composition. The
XX composition is used for detecting a target microorganism. It is used in a
XX bi-directional DNA sequencing method in several contexts including
XX detection of mutations, particularly mutations of medical significance,
XX in samples derived from a human patient, animal, plant, or microorganism;
XX determination of HLA (human leukocyte antigen) type ancillary to
XX transplant procedures; detection and identification of microorganisms,
XX particularly pathogenic microorganisms, in a sample and in situ
XX sequencing reactions to produce sequencing fragments within a
XX histological specimen which are then removed from a selected location on
XX the tissue preparation and loaded onto a gel for sequence analysis. The
XX invention allows an evaluation to be directly performed on a natural
XX abundance DNA sample. It provides for bi-directional sequencing of DNA
XX which requires combining a complex DNA-containing sample with only a
XX single reaction mixture, thus reducing risk of error and contamination,
XX and increasing the ease with which the procedure can be automated. The
XX present sequence represents a sequencing primer for identification of a
XX microorganism.
XX
SQ Sequence 21 BP; 4 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2667 CTAGTGAAGACTTACACAAGC 2687
DB 21 CTAGTGAAGACTTACACAAGC 1
XX
RESULT 50
AAx81617
ID AAx81617 standard; DNA; 20 BP.
XX
AC AAx81617;
XX
XX 26-AUG-1999 (first entry)
XX
XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
XX Synthetic.
XX
XX Erythrovirus.
XX
XX FR2771751-A1.
XX
XX 04-JUN-1999.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX

```

```

XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
XX
XX Nguyen QT, Garbary CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.
XX
XX Claim 3; Page 29; 80pp; French.
XX
XX AAx81588-X81630 represent PCR primers used to amplify erythrovirus V9
XX polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX polynucleotide sequences (AAx81580) can be used for differential
XX diagnosis of erythrovirus (parvovirus) infections by a combination of
XX amplification and hybridisation assay. The probes can also be used to
XX assess susceptibility to erythrovirus infection and for erythrovirus
XX screening and typing. The antibodies can be used in immunoassays for
XX diagnosis of erythrovirus V9 infections
XX
SQ Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4055 ACAGGAAATTAATGCCATTTC 4074
DB 1 ACAGGAAATTAATGCCATTTC 20
XX
RESULT 51
AAx81591
ID AAx81591 standard; DNA; 20 BP.
XX
AC AAx81591;
XX
XX 26-AUG-1999 (first entry)
XX
XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
XX Synthetic.
XX
XX Erythrovirus.
XX
XX FR2771751-A1.
XX
XX 04-JUN-1999.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
XX
XX Nguyen QT, Garbary CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.
XX
XX Claim 3; Page 22; 80pp; French.
XX
XX AAx81588-X81630 represent PCR primers used to amplify erythrovirus V9
XX polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX polynucleotide sequences (AAx81580) can be used for differential
XX diagnosis of erythrovirus (parvovirus) infections by a combination of

```


CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections

XX Sequence 20 BP; 3 A; 1 C; 10 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 37;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1429 TTGGTGTCTGGGATGAAGG 1448

Db 1 TTGGTGTCTGGGATGAAGG 20

RESULT 52
 AAX81600
 ID AAX81600 standard; DNA; 20 BP.

XX AAX81600;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.

XX Synthetic.

OS Erythrovirus.

XX FR2771751-A1.

PD 04-JUN-1999.

XX 03-DEC-1997; 97FR-00015197.

PR 03-DEC-1997; 97FR-00015197.

PA (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.

PI Nguyen QT, Garbarg CA, Auguste V;

DR WPI; 1999-349543/30.

XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.

PS Claim 3; Page 25; 80pp; French.

XX AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections

XX Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 37;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2062 CAGTTTCGTGACTGTAGT 2081

Db 1 CAGTTTCGTGACTGTAGT 20

RESULT 53
 AAX81669

ID AAX81669 standard; DNA; 20 BP.

XX AAX81669;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.

XX Synthetic.

OS Erythrovirus.

XX FR2771751-A1.

PD 04-JUN-1999.

XX 03-DEC-1997; 97FR-00015197.

PR 03-DEC-1997; 97FR-00015197.

PA (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.

PI Nguyen QT, Garbarg CA, Auguste V;

DR WPI; 1999-349543/30.

XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.

PS Claim 3; Page 63; 80pp; French.

XX The present PCR primer is used to amplify erythrovirus V9 polynucleotide
 CC sequences. Probes and primers derived from erythrovirus V9 polynucleotide
 CC sequences (AAX81580) can be used for differential diagnosis of
 CC erythrovirus (parvovirus) infections by a combination of amplification
 CC and hybridisation assay. The probes can also be used to assess
 CC susceptibility to erythrovirus infection and for erythrovirus screening
 CC and typing. The antibodies can be used in immunoassays for diagnosis of
 CC erythrovirus V9 infections

XX Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 37;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1968 GACCACTTCAGAGATCAT 1987

Db 1 GACCACTTCAGAGATCAT 20

RESULT 54

ID AAX81671/c

XX AAX81671 standard; DNA; 20 BP.

AC AAX81671;

DT 26-AUG-1999 (first entry)

DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.

XX Synthetic.

OS Erythrovirus.

XX FR2771751-A1.

PD 04-JUN-1999.

PF 03-DEC-1997; 97FR-00015197.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
XX Nguyen QT, Garbarg CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.
XX
XX Claim 3; Page 64; 80pp; French.
XX
XX The present PCR primer is used to amplify erythrovirus V9 polynucleotide
XX sequences. Probes and primers derived from erythrovirus V9 polynucleotide
XX sequences (AAx81580) can be used for differential diagnosis of
XX erythrovirus (parvovirus) infections by a combination of amplification
XX and hybridisation assay. The probes can also be used to assess
XX susceptibility to erythrovirus infection and for erythrovirus screening
XX and typing. The antibodies can be used in immunoassays for diagnosis of
XX erythrovirus V9 infections
XX
XX Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 37;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 2298 ATGTGCTTACTGCTGTGAT 2317
XX 20 ATGTGCTTACTGCTGTGAT 1
XX
XX RESULT 55
XX AAX81674/C
XX ID AAX81674 standard; DNA; 20 BP.
XX
XX AAX81674;
XX
XX 26-AUG-1999 (first entry)
XX
XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
XX Synthetic.
XX Erythrovirus.
XX
XX FR2771751-A1.
XX
XX 04-JUN-1999.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
XX Nguyen QT, Garbarg CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.
XX
XX Claim 3; Page 64; 80pp; French.
XX
XX The present PCR primer is used to amplify erythrovirus V9 polynucleotide
XX sequences. Probes and primers derived from erythrovirus V9 polynucleotide
XX sequences (AAX81580) can be used for differential diagnosis of
XX sequences (AAX81580) can be used for differential diagnosis of

CC erythrovirus (parvovirus) infections by a combination of amplification
CC and hybridisation assay. The probes can also be used to assess
CC susceptibility to erythrovirus infection and for erythrovirus screening
CC and typing. The antibodies can be used in immunoassays for diagnosis of
CC erythrovirus V9 infections
XX
XX Sequence 20 BP; 6 A; 4 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 37;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 2793 ATGACTTTAGGTATAGCCAA 2812
XX 20 ATGACTTTAGGTATAGCCAA 1
XX
XX RESULT 56
XX AAX81592
XX ID AAX81592 standard; DNA; 20 BP.
XX
XX AAX81592;
XX
XX 26-AUG-1999 (first entry)
XX
XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
XX Synthetic.
XX Erythrovirus.
XX
XX FR2771751-A1.
XX
XX 04-JUN-1999.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
XX Nguyen QT, Garbarg CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.
XX
XX Claim 3; Page 23; 80pp; French.
XX
XX AAX81586-X81630 represent PCR primers used to amplify erythrovirus V9
XX polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX polynucleotide sequences (AAX81580) can be used for differential
XX diagnosis of erythrovirus (parvovirus) infections by a combination of
XX amplification and hybridisation assay. The probes can also be used to
XX assess susceptibility to erythrovirus infection and for erythrovirus
XX screening and typing. The antibodies can be used in immunoassays for
XX diagnosis of erythrovirus V9 infections
XX
XX Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 37;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1693 ACAGAGGCTGATGATACAA 1712
XX 1 ACAGAGGCTGATGATACAA 20
XX
XX RESULT 57

AAAS611/c
 ID AAA53611 standard; DNA; 20 BP.
 AC AAA53611;
 XX
 XX
 DT 15-SEP-2003 (revised)
 DT 04-DEC-2000 (first entry)
 XX
 XX
 DE Primer B19.1699-al for parvovirus B19 genomic DNA amplification.
 XX
 XX TTV, TT virus; blood transmission; detection; amplification; primer;
 KM transplantation; xenotransplantation; vector; ss.
 XX
 XX B19 virus.
 OS
 XX WO200046407-A2.
 PN 10-AUG-2000.
 PD
 XX
 XX 04-FEB-2000; 2000MO-US002982.
 PF
 XX 05-FEB-1999; 99US-00245248.
 PR
 XX (ABBO) ABBOTT LAB.
 PA
 XX
 XX Leary TP, Simons JN, Erker JC, Chalmers ML, Birkenmeyer LG;
 PI Muerhoff AS, Pilot-Matias TJ, Desai SM, Mushahwar IK;
 DR WPI; 2000-514969/46.
 XX
 XX New oligomer primer useful for the detection of TT virus in test samples
 PT and tissues and organs for use in (xeno)transplantation.
 PT
 XX Example 2; Page 103; 139pp; English.
 PS
 XX Filtration studies to determine the approximate size of TT virus (TTV)
 CC virion were carried out using parvovirus B19-containing human serum as a
 CC comparison. Primers were used to detect the presence of the viruses in
 CC resulting filtrates. The TTV virions appear to exist in serum with a
 CC particle diameter between 30 and 50 nm. The TTV (3739 bp) was isolated
 CC from serum of a Japanese patient with cryptogenic hepatitis. The genome
 CC is circular and single-stranded. TTV DNA can be transmitted by blood or
 CC blood products. It is also possible that TTV is transmitted by a faecal-
 CC oral route, demonstrated by the presence of TTV in the faeces of infected
 CC humans. Detection of TTV in test samples can be enhanced by use of DNA
 CC amplification assays that use DNA oligomers as primers. The primers are
 CC useful for detecting the presence of TTV target nucleotides in biological
 CC samples and tissues and organs to be used in transplantation and
 CC xenotransplantation (claimed). The TTV genome itself can be used as a
 CC vector in order to introduce heterologous DNA into a host cell. (Updated
 CC on 15-SEP-2003 to standardise OS field)
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.4%; Score 20; DB 1; Length 20;
 ID Best Local Similarity 100.0%; Pred. No. 37;
 AC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1992 CGGAGCCCAAGTTCTCCG 2011
 DB 20 CGGAGCCCAAGTTCTCCG 1
 XX
 RESULT 58
 ID AAF75352/c
 AC AAF75352 standard; DNA; 20 BP.
 XX
 XX AAF75352;
 AC
 XX
 DT 11-SEP-2003 (revised)
 DT 11-MAY-2001 (first entry)
 XX
 DE Parvovirus B19 PCR primer PTL.r.

XX
 KM Parvovirus B19; quality assurance; nucleic acid amplification;
 KM microorganism detection; contamination identification; PCR primer; ss.
 XX
 XX B19 virus.
 OS
 XX WO200114593-A2.
 PN
 XX
 XX 01-MAR-2001.
 PD
 XX
 XX 14-AUG-2000; 2000MO-EP007892.
 PF
 XX 20-AUG-1999; 99AT-00001443.
 PR
 XX (BAXT) BAXTER AG.
 PA
 XX
 XX Zerlauth G, Gessner M, Koeltznitz K, Gross P;
 PI WPI; 2001-218460/22.
 DR
 XX
 XX
 PT Producing a pool of biological samples that is quality assured with
 PT regard to the load of microorganisms, especially viruses, comprises
 PT employing two nucleic acid amplification processes that differ in their
 PT sensitivity.
 PS
 XX Example; Page 13; 19pp; English.
 XX
 XX The present sequence was used in a method for producing a pool of
 CC biological samples that is quality assured with respect to the load of
 CC microorganisms, especially viruses. The method comprises testing a
 CC screening pool with a high sensitivity nucleic acid amplification method
 CC and dividing the pool into subpools, which are tested with a less
 CC sensitive nucleic acid amplification method. Individual samples are then
 CC picked out and eliminated. The method enables a reliable identification
 CC of contaminated individual samples, especially highly contaminated
 CC individual samples, as well as adherence to certain limit values for such
 CC contaminants in the pool. The method is also less expensive and is
 CC simpler to use than other known pool testing methods. (Updated on 11-SEP-
 CC 2003 to standardise OS field)
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
 XX
 Query Match 0.4%; Score 20; DB 1; Length 20;
 ID Best Local Similarity 100.0%; Pred. No. 37;
 AC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2682 ACAAGCCTGGGCAAGTTAGC 2701
 DB 20 ACAAGCCTGGGCAAGTTAGC 1
 XX
 RESULT 59
 ID AAX81667
 AC AAX81667 standard; DNA; 19 BP.
 XX
 XX AAX81667;
 AC
 XX
 DT 26-AUG-1999 (first entry)
 DT
 XX
 DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
 DE
 XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
 XX
 XX Synthetic.
 OS
 XX Erythrovirus.
 XX
 PN FR2771751-A1.
 PD
 XX 04-JUN-1999.
 PD
 XX 03-DEC-1997; 97FR-00015197.
 PF
 XX

```

PR 03-DEC-1997; 97FR-00015197.
XX (ASST-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
XX
XX Nguyen QT, Garbarg CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX PT diagnosis of its infections.
XX
XX Claim 3; Page 63; 80pp; French.
XX
XX The present PCR primer is used to amplify erythrovirus V9 polynucleotide
XX CC sequences. Probes and primers derived from erythrovirus V9 polynucleotide
XX CC sequences (AAx81580) can be used for differential diagnosis of
XX CC erythrovirus (parvovirus) infections by a combination of amplification
XX CC and hybridisation assay. The probes can also be used to assess
XX CC susceptibility to erythrovirus infection and for erythrovirus screening
XX CC and typing. The antibodies can be used in immunoassays for diagnosis of
XX CC erythrovirus V9 infections
XX
XX Sequence 19 BP; 4 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1797 TGCAGATGCCCTCCACCCA 1815
Db 1 TGCAGATGCCCTCCACCCA 19
RESULT 60
AAx81604
ID AAx81604 standard; DNA; 19 BP.
XX
XX AAx81604;
XX
XX 26-AUG-1999 (first entry)
XX
XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
XX Synthetic.
XX OS Erythrovirus.
XX
XX FR2771751-A1.
XX
XX 04-JUN-1999.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASST-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
XX
XX Nguyen QT, Garbarg CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX PT diagnosis of its infections.
XX
XX Claim 3; Page 26; 80pp; French.
XX
XX AAx81588-X81630 represent PCR primers used to amplify erythrovirus V9
XX CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX CC polynucleotide sequences (AAx81580) can be used for differential
XX CC diagnosis of erythrovirus (parvovirus) infections by a combination of
XX CC amplification and hybridisation assay. The probes can also be used to
XX CC assess susceptibility to erythrovirus infection and for erythrovirus
XX CC screening and typing. The antibodies can be used in immunoassays for
XX CC diagnosis of erythrovirus V9 infections
XX
XX Sequence 19 BP; 4 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1797 TGCAGATGCCCTCCACCCA 1815
Db 1 TGCAGATGCCCTCCACCCA 19

```

```

CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC CC diagnosis of erythrovirus V9 infections
XX
XX Sequence 19 BP; 6 A; 3 C; 1 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2562 TATATAGTCATCATTTTCA 2580
Db 1 TATATAGTCATCATTTTCA 19
RESULT 61
AAx81606
ID AAx81606 standard; DNA; 19 BP.
XX
XX AAx81606;
XX
XX 26-AUG-1999 (first entry)
XX
XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX
XX Synthetic.
XX OS Erythrovirus.
XX
XX FR2771751-A1.
XX
XX 04-JUN-1999.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASST-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
XX
XX Nguyen QT, Garbarg CA, Auguste V;
XX
XX WPI; 1999-349543/30.
XX
XX Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX PT diagnosis of its infections.
XX
XX Claim 3; Page 26; 80pp; French.
XX
XX AAx81588-X81630 represent PCR primers used to amplify erythrovirus V9
XX CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX CC polynucleotide sequences (AAx81580) can be used for differential
XX CC diagnosis of erythrovirus (parvovirus) infections by a combination of
XX CC amplification and hybridisation assay. The probes can also be used to
XX CC assess susceptibility to erythrovirus infection and for erythrovirus
XX CC screening and typing. The antibodies can be used in immunoassays for
XX CC diagnosis of erythrovirus V9 infections
XX
XX Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2635 TGCAGAACTGAGGAGAA 2653
Db 1 TGCAGAACTGAGGAGAA 19
RESULT 62
AAx81673
ID AAx81673 standard; DNA; 19 BP.

```

```

XX AC AAX81673;
XX XX
XX DT 26-AUG-1999 (first entry)
XX DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX KM Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX KW erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX OS Synthetic.
XX OS Erythrovirus.
XX PN FR2771751-A1.
XX PD 04-JUN-1999.
XX PF 03-DEC-1997; 97FR-00015197.
XX PR 03-DEC-1997; 97FR-00015197.
XX PA (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX PI Nguyen QT, Garbary CA, Auguste V;
XX DR WPI; 1999-349543/30.
XX PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX PT diagnosis of its infections.
XX PS Claim 3; Page 64; 80pp; French.
XX CC The present PCR primer is used to amplify erythrovirus V9 polynucleotide
XX CC sequences. Probes and primers derived from erythrovirus V9 polynucleotide
XX CC sequences (AAX81580) can be used for differential diagnosis of
XX CC erythrovirus (parvovirus) infections by a combination of amplification
XX CC and hybridisation assay. The probes can also be used to assess
XX CC susceptibility to erythrovirus infection and for erythrovirus screening
XX CC and typing. The antibodies can be used in immunoassays for diagnosis of
XX CC erythrovirus V9 infections
XX SQ Sequence 19 BP; 5 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2609 CATGCTTATCATCCAGTA 2627
DB 1 CATGCTTATCATCCAGTA 19

RESULT 63
AAX81670/c
ID AAX81670 standard; DNA; 19 BP.
XX AC AAX81670;
XX XX
XX DT 26-AUG-1999 (first entry)
XX DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX KM Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX KW erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX OS Synthetic.
XX OS Erythrovirus.
XX PN FR2771751-A1.
XX PD 04-JUN-1999.
XX PF 03-DEC-1997; 97FR-00015197.

```

```

XX PR 03-DEC-1997; 97FR-00015197.
XX XX
XX PA (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX PI Nguyen QT, Garbary CA, Auguste V;
XX DR WPI; 1999-349543/30.
XX PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX PT diagnosis of its infections.
XX PS Claim 3; Page 63; 80pp; French.
XX CC The present PCR primer is used to amplify erythrovirus V9 polynucleotide
XX CC sequences. Probes and primers derived from erythrovirus V9 polynucleotide
XX CC sequences (AAX81580) can be used for differential diagnosis of
XX CC erythrovirus (parvovirus) infections by a combination of amplification
XX CC and hybridisation assay. The probes can also be used to assess
XX CC susceptibility to erythrovirus infection and for erythrovirus screening
XX CC and typing. The antibodies can be used in immunoassays for diagnosis of
XX CC erythrovirus V9 infections
XX SQ Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2043 TTTACAGCCGCTTGCCGAT 2061
DB 19 TTTACAGCCGCTTGCCGAT 1

RESULT 64
AAA95712
ID AAA95712 standard; DNA; 20 BP.
XX AC AAA95712;
XX XX
XX DT 14-FEB-2001 (first entry)
XX DE Parvovirus strain B19 primer.
XX KM Parvovirus strain B19; serum; blood; PCR primer; diagnostic; medicine;
XX KW virology; ss.
XX OS Parvovirus.
XX OS
XX PN RU2146372-Cl.
XX PD 10-MAR-2000.
XX PF 16-APR-1998; 98RU-00107396.
XX PR 16-APR-1998; 98RU-00107396.
XX PA (AMHA-) A MED HAEMATOLOGY RES CENTRE.
XX PI Fevralleva IS, Sudarikov AB;
XX DR WPI; 2000-585773/55.
XX PT Method of assay of parvovirus b 19.
XX PS Disclosure; Col 3; 4pp; Russian.
XX CC The invention relates to an effective and highly specific method of
XX CC assaying for parvovirus strain B19 in blood serum. The method is based on
XX CC the use of a two-stage polymerase chain reaction (PCR) involving a
XX CC preliminary heat treatment of the sera at 95 deg. C for 10 min. The
XX CC method involves the use of sera which have not been treated with an
XX CC proteinase K. The first PCR uses primers AAA95708-A95709 with an

```

CC annealing temperature of 44 deg. C. The second stage uses PCR primers
 CC AAA55710-A55711 with an annealing temperature of 56 deg. C. The two PCRs
 CC are carried out in a single tube. The method is used in medicine and
 CC virology. This sequence is used as a primer in the method of the
 CC invention

SQ Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 63;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2797 CTTAGTATAGCAATGG 2816
 DB 1 CTTAGTATAGCAACTGG 20

RESULT 65
 AAF57981/C
 ID AAF57981 standard; DNA; 20 BP.

AC AAF57981;

XX 20-APR-2001 (first entry)

DE Human parvovirus B19/porcine parvovirus detection PCR primer PRV2.

XX Human parvovirus B19; diagnosis; erythema infectiosum; aplastic crisis;

KM polyarthralgia syndrome; hydrops; myocarditis; neurological disease;

XX porcine parvovirus; PCR primer; probe; ss.

OS B19 virus.

XX Porcine parvovirus.

XX WO200106019-A2.

XX 25-JAN-2001.

XX 20-JUL-2000; 2000WO-US019896.

XX 20-JUL-1999; 99US-0144721P.

XX 19-JUL-2000; 2000US-00619420.

XX (VITE-) VI TECHNOLOGIES INC.

XX Lazo A, Zhao JX, Tassello JA, Glibaja V;

XX WPI; 2001-147359/15.

XX New PRVX nucleic acid molecule useful as a probe for detecting and

PT amplifying parvovirus in sample of nucleic acid molecules and for

PT diagnosing a disease or a condition associated with parvovirus infection

PT in a subject.

XX Claim 10; Page 6; 30pp; English.

XX The present invention provides a number of PCR primers and probes which

CC can be used to detect the presence of human parvovirus B19 (also known as

CC B19 virus) and porcine parvovirus. This is useful as it enables the

CC diagnosis of diseases associated with B19 virus, including transient

CC aplastic crises, erythema infectiosum, polyarthralgia syndrome, hydrops,

CC myocarditis and neurological disease

XX Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

QY Query Match 0.4%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. No. 63;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 414 AGATACCTTCTGACTGGGAC 433

DB 20 AGACACTTCTGACTGGGAC 1

RESULT 66

AAD21304

ID AAD21304 standard; DNA; 20 BP.

XX AAD21304;

XX 28-JAN-2002 (first entry)

DE 3' primer used to amplify DNA template with p53 or ER binding site.

XX DNA binding protein; therapy; cancer; p53 protein; estrogen receptor; ER;

KW PCR primer; ss.

XX Synthetic.

XX EP1138781-A2.

XX 04-OCT-2001.

XX 19-MAR-2001; 2001EP-00106806.

XX 31-MAR-2000; 2000US-00539945.

XX (HEAL-) HEALTH RES INC.

XX Kulesz-Martin MF, Liu Y;

XX WPI; 2001-649890/75.

XX Quantifying DNA binding protein in a sample in absence of radioisotopes

PT comprising contacting the protein with DNA having binding site for

PT protein, separating DNA with bound protein and quantifying protein by

PT immunoreaction.

XX Disclosure; Page 10; 26pp; English.

XX The invention relates to a method for quantifying DNA binding protein in

CC a sample. The method is useful for identifying sequence specific DNA

CC binding proteins, for screening compounds, proteins and reagents that

CC target DNA-protein interactions and for simultaneously detecting multiple

CC DNA binding protein having different molecular weights. The index

CC reflecting proportion of bound and unbound protein in total protein is

CC useful to determine the course of treatment for a patient or prognosis

CC for a patient, to screen for activity of therapies and agents that alter

CC activity of DNA binding protein favourable to treatment of disease,

CC preferably cancer. The method is useful for research, for prognostic

CC indicators in many diseases e.g. cancer and for detecting and quantifying

CC the functional status of DNA binding protein that are significant in

CC human disease by reflecting severity, prognosis and integrity of the

CC cellular response to treatments. The present sequence is a PCR primer

CC used to amplify a DNA template with p53 or ER (estrogen receptor) binding

CC site. This sequence is used to measure the DNA binding of p53 protein

XX Sequence 20 BP; 9 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

QY Query Match 0.4%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. No. 63;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 948 AAAGGAAACAAAGCGGCT 967

DB 1 AAAGGAAACAAAGCTGGGT 20

RESULT 67

AB259579/C

ID AB259579 standard; DNA; 20 BP.

XX AB259579;

XX 22-APR-2003 (first entry)

DE	Human parvovirus B19 VP1 PCR primer VP-3 SEQ ID NO:37.
KX	
KW	Human parvovirus B19; parvovirus B19; infection; virus; blood; plasma; PCR primer; ss.
XX	
OS	B19 virus. Synthetic.
PN	
XX	WO2003002753-A2.
XX	
PD	09-JAN-2003.
XX	
PF	28-JUN-2002; 2002WO-US020684.
PR	28-JUN-2001; 2001US-0302077P.
PR	19-MAR-2002; 2002US-0365956P.
PR	29-MAR-2002; 2002US-0369224P.
XX	
PA	(CHIR) CHIRON CORP.
XX	
P1	Pichuanes S, Shyamala V;
XX	
DR	WI ; 2003-201510/19.
XX	
PT	Detecting a human parvovirus B19 infection in a biological sample to prevent viral transmission, comprises reacting a parvovirus B19 nucleic acid with a primer complementary to the 3'-terminal portion of the RNA target sequence.
PT	
XX	
PS	Example 2; Page 42; 14bp; English.
XX	
CC	The present invention describes a method for detecting a human parvovirus B19 infection in a biological sample. The method comprises reacting the isolated parvovirus B19 nucleic acid with a first oligonucleotide consisting of a first primer containing a complexing sequence sufficiently complementary to the 3'-terminal portion of the RNA target sequence to complex with. Also described: (1) amplifying a target parvovirus B19 nucleotide sequence; (2) a polynucleotide comprising one of 47 700 base pair sequences (see ABZ59549 to ABZ59569, and ABZ59604 to ABZ59629); (3) a polynucleotide comprising either of 2 4678 base pair sequences (see ABZ59570 and ABZ59571); (4) an oligonucleotide primer consisting of a promoter region recognised by a DNA-dependent RNA polymerase operably linked to a human parvovirus B19-specific complexing sequence of 10-75 nucleotides; (5) an oligonucleotide probe comprising a parvovirus B19-specific hybridising sequence of 10-50 nucleotides linked to an acridinium ester label; and (6) a diagnostic test kit comprising an oligonucleotide primer of (4), and instructions for conducting the diagnostic test. The method is useful for detecting parvovirus infection in a biological sample, such as in blood products, to prevent transmission of the virus through blood and plasma derivatives or by close personal contact. ABZ59549 to ABZ59634 and ABP57262 to ABP57267 represent sequences used in the exemplification of the present invention
XX	
SQ	Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
	Query Match. 0.4%; Score 18.4; DB 1; Length 20;
	Best Local Similarity 95.0%; Pred. No. 63;
	Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0.
OY	3315 CACCATTTAGAGTTTCAGCAC 3334 Db 20 CACTTTAGAGTTTCAGCAC 1
RESULT 68	
ACC43299	
ID ACC43299 standard; DNA; 20 BP.	
XX ACC43299;	
AC	
XX	
DT 27-OCT-2003 (revised)	
DT 11-AUG-2003 (first entry)	
XX	

```
DE Nucleotide sequence of a probe for human parvovirus B19 DNA.
XX
XX Parvovirus detection; probe; ss.
XX
XX B19 virus.
XX
XX WO2003020742-A1.
XX
XX 13-MAR-2003.
XX
XX 30-AUG-2002; 2002WO-US027734.
XX
XX 31-AUG-2001; 2001US-0316691P.
XX
XX (GENP-) GEN-PROBE INC.
XX
XX Brentano ST, Batranina-Kamineky M, Haesekus-Light CS, Kolk DP;
XX WPI; 2003-300859/29.
XX
XX Detecting human parvovirus B19 nucleic acid in biological sample involves
XX carrying out amplification reaction of parvovirus B19 nucleic acid using
XX human parvovirus specific nucleic acid oligomers.
XX
XX Claim 1; Page 33; 54pp; English.
XX
XX The present sequence represents a probe for parvovirus B19 DNA. It is
XX used in the method of the invention. The specification describes a method
XX of detecting human parvovirus B19 nucleic acid in a biological sample.
XX
XX The method comprises amplifying in vitro a portion of human parvovirus
XX B19 nucleic acid, and detecting an amplified product using a labeled
XX detection probe that hybridizes specifically with the amplified product.
XX The method is useful for detecting human parvovirus B19 nucleic acid in
XX biological samples. (Updated on 27-OCT-2003 to standardise OS field)
XX
XX Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
XX
Query Match          0.4%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred.No. 63;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY      2583 GCCATGACAGTATTCTGCAC 2602
        |||||
Db       1   GTCATGGACAGTTATCTGCAC 20
RESULT 69
AAx81603
ID      AAx81603 standard; DNA; 18 BP.
AC      AAx81603;
XX
XX 26-AUG-1999 (first entry)
XX
XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
DE
XX
XX Erythrovirus V9; differential diagnosis; parvovirus; infection;
KW erythrovirus screening; typing; immunoassay; PCR primer; ss.
OS Synthetic.
OS Erythrovirus.
XX
XX FR2771751-A1.
XX
XX 04-JUN-1999.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX 03-DEC-1997; 97FR-00015197.
XX
XX (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX
XX Nguyen QT, Garbarg CA, Auguste V;
```

```

XX DR WPI; 1999-349543/30.
XX PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX PT diagnosis of its infections.
XX PS Claim 3; Page 25; 80pp; French.
XX CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
XX CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX CC polynucleotide sequences (AAX81580) can be used for differential
XX CC diagnosis of erythrovirus (parvovirus) infections by a combination of
XX CC amplification and hybridisation assay. The probes can also be used to
XX CC assess susceptibility to erythrovirus infection and for erythrovirus
XX CC screening and typing. The antibodies can be used in immunoassays for
XX CC diagnosis of erythrovirus V9 infections
XX SQ Sequence 18 BP; 7 A; 6 C; 1 G; 4 T; 0 U; 0 Other;

Query Match      0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2543 CTTAAAACTCTCCAGAC 2560
Db      1 CTTAAAACTCTCCAGAC 18

RESULT 70
AAX81620
ID AAX81620 standard; DNA; 18 BP.
AC AAX81620;
XX
XX 26-AUG-1999 (first entry)
XX
XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX DE Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX KW erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX OS Synthetic.
XX OS Erythrovirus.
XX PN FR2771751-A1.
XX PD 04-JUN-1999.
XX PF 03-DEC-1997; 97FR-00015197.
XX PR 03-DEC-1997; 97FR-00015197.
XX PA (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
XX PI Nguyen QT, Garbary CA, Auguste V;
XX DR WPI; 1999-349543/30.
XX PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX PT diagnosis of its infections.
XX PS Claim 3; Page 29; 80pp; French.
XX CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
XX CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX CC polynucleotide sequences (AAX81580) can be used for differential
XX CC diagnosis of erythrovirus (parvovirus) infections by a combination of
XX CC amplification and hybridisation assay. The probes can also be used to
XX CC assess susceptibility to erythrovirus infection and for erythrovirus
XX CC screening and typing. The antibodies can be used in immunoassays for
XX CC diagnosis of erythrovirus V9 infections
XX SQ Sequence 18 BP; 6 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

```

```

Query Match      0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4288 TCAGCTGTGAGTAAAT 4305
Db      1 TCAGCTGTGAGTAAAT 18

RESULT 71
ACC43312
ID ACC43312 standard; DNA; 18 BP.
XX
XX ACC43312;
XX AC
XX DT 27-OCT-2003 (revised)
XX DT 11-AUG-2003 (first entry)
XX
XX Nucleotide sequence of a probe for human parvovirus B19 DNA.
XX DE Parvovirus detection; probe; ss.
XX KW
XX OS B19 virus.
XX OS
XX PN WO2003020742-A1.
XX PD 13-MAR-2003.
XX PF 30-AUG-2002; 2002WO-US027734.
XX PR 31-AUG-2001; 2001US-031691P.
XX PA (GENP-) GEN-PROBE INC.
XX PI Brentano ST, Battrania-Kaminsky M, Haseljus-Light CS, Kolk DP;
XX DR WPI; 2003-300859/29.
XX
XX Detecting human parvovirus B19 nucleic acid in biological sample involves
XX PT carrying out amplification reaction of parvovirus B19 nucleic acid using
XX PT human parvovirus specific nucleic acid oligomers.
XX PS Claim 10; Page 48; 54pp; English.
XX
XX The present sequence represents a probe for parvovirus B19 DNA. It is
XX CC used in the method of the invention. The specification describes a method
XX CC of detecting human parvovirus B19 nucleic acid in a biological sample.
XX CC The method comprises amplifying in vitro a portion of human parvovirus
XX CC B19 nucleic acid, and detecting an amplified product using a labeled
XX CC detection probe that hybridizes specifically with the amplified product.
XX CC The method is useful for detecting human parvovirus B19 nucleic acid in
XX CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)
XX SQ Sequence 18 BP; 6 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2660 GTATTATCTAGTGAAGAC 2677
Db      1 GTATTATCTAGTGAAGAC 18

RESULT 72
ACC43311
ID ACC43311 standard; DNA; 18 BP.
XX
XX ACC43311;
XX AC
XX DT 27-OCT-2003 (revised)
XX DT 11-AUG-2003 (first entry)

```


sequence to complex with. Also described: (1) amplifying a target parvovirus B19 nucleotide sequence; (2) a polynucleotide comprising one of 47 700 base pair sequences (see AB259549 to AB259604 to AB259622); (3) a polynucleotide comprising either of 2 4678 base pair sequences (see AB259570 and AB259571); (4) an oligonucleotide primer consisting of a promoter region recognised by a DNA-dependent RNA polymerase operably linked to a human parvovirus B19-specific complexing sequence of 10-75 nucleotides; (5) an oligonucleotide probe comprising a parvovirus B19-specific hybridising sequence of 10-50 nucleotides linked to an acridinium ester label; and (6) a diagnostic test kit comprising an oligonucleotide primer of (4), and instructions for conducting the diagnostic test. The method is useful for detecting parvovirus infection in a biological sample, such as in blood products, to prevent transmission of the virus through blood and plasma derivatives or by close personal contact. AB259549 to AB259634 and AB259634 to AB2597267 represent sequences used in the exemplification of the present invention

Query Match 0.3%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 76;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3316 ACCATTAGATTTCAGCAC 3334
19 ACCTTAGATTTCAGCAC 1

RESULT 75
AAK81595
ID AAK81595 standard; DNA; 17 BP.

XX AAK81595;

DT 26-AUG-1999 (first entry)

XX PCR primer used to amplify erythrovirus V9 nucleotide sequences.

XX Erythrovirus V9; differential diagnosis; parvovirus; infection;

KW erythrovirus screening; typing; immunoassay; PCR primer; 88.

XX Synthetic.

OS Erythrovirus.

XX FR27171751-A1.

PN 04-JUN-1999.

PF 03-DEC-1997; 97FR-00015197.

PR 03-DEC-1997; 97FR-00015197.

XX (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.

PA Nguyen QT, Garbarg CA, Auguste V;

PI WPI; 1999-349543/30.

PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.

PS Claim 3; Page 23; 80pp; French.

XX AAK81588-X81630 represent PCR primers used to amplify erythrovirus V9
CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC polynucleotide sequences (AAK81580) can be used for differential
CC diagnosis of erythrovirus (parvovirus) infections by a combination of
CC amplification and hybridisation assay. The probes can also be used to
CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC diagnosis of erythrovirus V9 infections
XX
SQ Sequence 17 BP; 3 A; 3 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.3%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1777 TTGTATTCCTCGAAT 1793
1 TTGTATTCCTCGAAT 17

RESULT 76
AAQ23988
ID AAQ23988 standard; DNA; 18 BP.

XX AAQ23988;

DT 27-AUG-2003 (revised)

DT 26-OCT-1992 (first entry)

XX VP-1/VP-2 gene primer (4).

XX VP-1; VP-2; parvo; virus; antigen; diagnosis; 88.

XX B19 virus.

PN JP04088985-A.

PD 23-MAR-1992.

XX 31-JUL-1990; 90JP-00202827.

XX 31-JUL-1990; 90JP-00202827.

XX (MITU) MITSUBISHI KASEI CORP.

PA WPI; 1992-147290/18.

PT Human parvovirus structural protein VP-1 and VP-2 genes - and recombinant
XX antigen useful for the diagnosis of infectious erythema virus.

XX Disclosure; Fig 1; 7pp; Japanese.

XX The primers represented in AAQ23985-90 are used in PCR for the
CC amplification of human parvovirus VP-1 and VP-2 gene fragments. Human
CC parvovirus VP-1 gene has the partial base sequence given in AAQ23980-82.
CC Human parvovirus VP-2 gene has the partial base sequence given in
CC AAQ23981-82. The gene can be used to prepare a recombinant antigen which
CC can be used for the diagnosis of parvovirus infection by radio-
CC immunoassay and enzyme immunoassay. (Updated on 27-AUG-2003 to correct OS
CC field.)

XX Sequence 18 BP; 5 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 92;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4279 CTATGAAGTCAGCTGTG 4296
1 CTATGAAGTCAGCTGTG 18

RESULT 77

ACC43310
ID ACC43310 standard; DNA; 18 BP.

XX ACC43310;

DT 27-OCT-2003 (revised)

DT 11-AUG-2003 (first entry)

XX Nucleotide sequence of a probe for human parvovirus B19 DNA.

```
XX Nucleotide sequence of a probe for human parvovirus B19 DNA.
DE Parvovirus detection; probe; ss.
XX B19 virus.
XX WO2003020742-A1.
XX 13-MAR-2003.
XX 30-AUG-2002; 2002WO-US027734.
XX 31-AUG-2001; 2001US-0316691P.
XX (GENP-) GEN-PROBE INC.
XX Brentano ST, Batranina-Kaminsky M, Hasselkus-light CS, Kolk DP,
PI WPI; 2003-300859/29.
XX Detecting human parvovirus B19 nucleic acid in biological sample involves
PT carrying out amplification reaction of parvovirus B19 nucleic acid using
PT human parvovirus specific nucleic acid oligomers.
XX Claim 12; Page 47; 54pp; English.
XX The present sequence represents a probe for parvovirus B19 DNA. It is
CC used in the method of the invention. The specification describes a method
CC of detecting human parvovirus B19 nucleic acid in a biological sample.
CC The method comprises amplifying in vitro a portion of human parvovirus
CC B19 nucleic acid, and detecting an amplified product using a labeled
CC detection probe that hybridizes specifically with the amplified product.
CC The method is useful for detecting human parvovirus B19 nucleic acid in
CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)
XX Sequence 18 BP; 7 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2670 GTGAAGACTTACACAGC 2687
DB 1 GTGAAGACTTACACAGC 18
RESULT 73
AAA95711/C
ID AAA95711 standard; DNA; 19 BP.
XX AAA95711;
AC AAA95711;
XX 14-FEB-2001 (first entry)
DT 14-FEB-2001 (first entry)
XX Parvovirus strain B19 detection primer #4.
DE Parvovirus strain B19; serum; blood; PCR primer; diagnostic; medicine;
XX virology; ss.
XX Parvovirus.
XX RU2146372-C1.
XX 10-MAR-2000.
PD 10-MAR-2000.
XX 16-APR-1998; 98RU-00107396.
PF 16-APR-1998; 98RU-00107396.
XX 16-APR-1998; 98RU-00107396.
PR 16-APR-1998; 98RU-00107396.
XX (AMIA-) A MED HAEMATOLOGY RES CENTRE.
PA (AMIA-) A MED HAEMATOLOGY RES CENTRE.
XX Fevralleva IS, Sudarikov AB;
PI
```

```
XX WPI; 2000-585773/55.
DR WPI; 2000-585773/55.
XX Method of assay of parvovirus b 19.
PT Method of assay of parvovirus b 19.
XX Claim; Col 8; 4pp; Russian.
XX The invention relates to an effective and highly specific method of
CC assaying for parvovirus strain B19 in blood serum. The method is based on
CC the use of a two-stage polymerase chain reaction (PCR) involving a
CC preliminary heat treatment of the sera at 95 deg. C for 10 min. The
CC method involves the use of sera which have not been treated with an
CC proteinase K. The first PCR uses primers AAA95708-A95709 with an
CC annealing temperature of 44 deg. C. The second stage uses PCR primers
CC AAA95710-A95711 with an annealing temperature of 56 deg. C. The two PCRs
CC are carried out in a single tube. The method is used in medicine and
CC virology
XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 76;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2303 CTTACTGTCTGGATTACA 2321
DB 19 CTTACTGTCTGGATTACA 1
RESULT 74
ABZ59601/C
ID ABZ59601 standard; DNA; 19 BP.
XX ABZ59601;
AC ABZ59601;
XX 22-APR-2003 (first entry)
DT 22-APR-2003 (first entry)
XX Human parvovirus B19 PCR primer VSP2 SEQ ID NO:59.
DE Human parvovirus B19 PCR primer VSP2 SEQ ID NO:59.
XX Human parvovirus B19; parvovirus B19; infection; virus; blood; plasma;
XX PCR primer; ss.
XX B19 virus.
OS B19 virus.
XX Synthetic.
XX WO2003002753-A2.
PN WO2003002753-A2.
XX 09-JAN-2003.
PD 09-JAN-2003.
XX 28-JUN-2002; 2002WO-US020684.
PF 28-JUN-2002; 2002WO-US020684.
XX 28-JUN-2001; 2001US-0302077P.
PR 28-JUN-2001; 2001US-0302077P.
XX 19-MAR-2002; 2002US-0365956P.
PR 19-MAR-2002; 2002US-0365956P.
XX 29-MAR-2002; 2002US-0369224P.
PR 29-MAR-2002; 2002US-0369224P.
XX (CHIR ) CHIRON CORP.
PA (CHIR ) CHIRON CORP.
XX Pichuanes S, Shyamala V;
PI Pichuanes S, Shyamala V;
XX WPI; 2003-201510/19.
DR WPI; 2003-201510/19.
XX Detecting a human parvovirus B19 infection in a biological sample to
PT prevent viral transmission, comprises reacting a parvovirus B19 nucleic
PT acid with a primer complementary to the 3'-terminal portion of the RNA
PT target sequence.
XX Example 5; Page 52; 148pp; English.
PS Example 5; Page 52; 148pp; English.
XX The present invention describes a method for detecting a human parvovirus
CC B19 infection in a biological sample. The method comprises reacting the
CC isolated parvovirus B19 nucleic acid with a first oligonucleotide
CC consisting of a first primer containing a complexing sequence
CC sufficiently complementary to the 3'-terminal portion of the RNA target
```

DR WPI; 1996-300653/30.
 XX Enzymatic nucleic acid molecules having a hammer-head motif - used for
 PT the treatment of arthritis, induction of graft tolerance or treatment of
 PT auto-immune diseases.
 XX Example 1; Page 155; 307pp; English.
 PS
 XX The present invention describes a novel enzymatic nucleic acid (ENA)
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
 CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
 CC ten 2',-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
 CC can inhibit collagenase and stromelysin production in the synovial
 CC membrane of joints for the treatment or prevention of arthritis,
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
 CC be used to treat antigen presenting cells of a donor to induce tolerance
 CC in a recipient to an alloantigen of a donor. They can also be used for
 CC enhancing graft tolerance or for treating autoimmune disease, and for
 CC treating allergies and other inflammatory conditions. The ENA's can also
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of
 CC stromelysin without introducing the non-specific effects upon gene
 CC expression which accompany treatment with retinoids and dexamethasone.
 CC The concentration of ribozyme required to affect a therapeutic treatment
 CC is lower than that required of antisense molecules, and is highly
 CC specific. The present sequence is used in the exemplification of the
 CC present invention
 CC
 SQ Sequence 17 BP; 6 A; 2 C; 6 G; 0 T; 3 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 76.5%; Pred. No. 1.1e+02;
 Matches 13; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 2738 AATGAGCTCAAGCTCG 2754
 DB 1 AAUGAGGUDACAAGCTCG 17
 RESULT 80
 AAX73073/c
 ID AAX73073 standard; RNA; 17 BP.
 XX
 AC AAX73073;
 XX
 XX 28-JUL-1999 (first entry)
 DT
 XX Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #506.
 DE
 XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; ocular disease;
 XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 XX foetal liver kinase 1; ss.
 XX
 OS Mus sp.
 XX
 XX WO9715662-A2.
 PN
 XX 01-MAY-1997.
 PD
 XX 25-OCT-1996; 96WO-US017480.
 XX
 XX 26-OCT-1995; 95US-0005974P.
 PR
 XX 11-JAN-1996; 96US-00584040.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX (CHIR) CHIRON CORP.
 XX
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 XX WPI; 1997-259017/23.
 DR
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA

PT stability - useful for treating e.g. tumour angiogenesis, psoriasis;
 PT rheumatoid arthritis, etc., in a human patient.
 XX
 PS Claim 4; Page 139; 218pp; English.
 XX
 XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention
 CC
 SQ Sequence 17 BP; 5 A; 2 C; 2 G; 0 T; 8 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 703 ACCAAGGAAATATT 719
 DB 17 ACCTAAGGAAATATT 1
 RESULT 81
 AAX71503/c
 ID AAX71503 standard; RNA; 17 BP.
 XX
 AC AAX71503;
 XX
 XX 28-JUL-1999 (first entry)
 DT
 XX Human KDR VEGF receptor hammerhead ribozyme substrate #515.
 DE
 XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; ocular disease;
 XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 XX foetal liver kinase 1; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO9715662-A2.
 PN
 XX 01-MAY-1997.
 PD
 XX 25-OCT-1996; 96WO-US017480.
 XX
 XX 26-OCT-1995; 95US-0005974P.
 PR
 XX 11-JAN-1996; 96US-00584040.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX (CHIR) CHIRON CORP.
 XX
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 XX WPI; 1997-259017/23.
 DR
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX
 PS Claim 4; Page 112; 218pp; English.
 XX
 XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour

KW Parvovirus detection; probe; ss.
 OS B19 virus.
 XX
 XX WO2003020742-A1.
 PN
 XX
 PD 13-MAR-2003.
 XX
 PF 30-AUG-2002; 2002WO-US027734.
 XX
 PR 31-AUG-2001; 2001US-0316691P.
 XX
 PA (GENP-) GEN-PROBE INC.
 XX
 PI Brentano ST, Batranina-Kaminsky M, Hasselkus-Light CS, Kolk DP;
 XX
 DR WPI; 2003-300859/29.
 XX
 PT Detecting human parvovirus B19 nucleic acid in biological sample involves
 PT carrying out amplification reaction of parvovirus B19 nucleic acid using
 PT human parvovirus specific nucleic acid oligomers.
 XX
 PS Disclosure; Page 47; 54pp; English.
 XX
 CC The present sequence represents a probe for parvovirus B19 DNA. It is
 CC used in the method of the invention. The specification describes a method
 CC of detecting human parvovirus B19 nucleic acid in a biological sample.
 CC The method comprises amplifying in vitro a portion of human parvovirus
 CC B19 nucleic acid, and detecting an amplified product using a labeled
 CC detection probe that hybridizes specifically with the amplified product.
 CC The method is useful for detecting human parvovirus B19 nucleic acid in
 CC biological samples. (Updated on 27-OCT-2003 to standardise OS field)
 XX
 SQ Sequence 18 BP; 4 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 92;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2583 GCCATGACAGTATCTCG 2600
 DB 1 GTCATGACAGTATCTCG 18

RESULT 78
 AAT81447
 ID AAT81447 standard; RNA; 17 BP.
 XX
 AC AAT81447;
 XX

DT 07-DEC-1997 (first entry)
 XX

DE Human c-myb hammerhead ribozyme target sequence (nt. position 2526).
 XX

KW Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
 KM smooch muscle cell; hyperproliferation; restenosis; cancer; c-myb;
 KW coronary angioplasty; ss.
 XX

OS Homo sapiens.
 XX

PN WO9531541-A2.
 XX

PD 23-NOV-1995.
 XX

PF 18-MAY-1995; 95WO-US006368.
 XX

PR 18-MAY-1994; 94US-00245466.
 XX

PR 13-JAN-1995; 95US-00373124.
 XX

PA (RIBO-) RIBOZYME PHARM INC.
 XX

PI Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
 XX

DR WPI; 1996-010927/01.
 XX
 XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
 PT for treating restenosis or cancer.
 XX
 XX Claim 1; Page 75; 128pp; English.
 XX
 CC The present sequence represents the preferred target sequence for an
 CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
 CC the human c-myb sequence at the base position indicated in the descriptor
 CC line. The c-myb sequence was screened for optimal ribozyme target sites
 CC using a computer folding algorithm, and regions of the mRNA which did not
 CC form secondary folding structures and contained potential ribozyme
 CC cleavage sites were identified. Ribozymes were synthesised and their
 CC activities optimised by either varying the length of the binding arms or
 CC by modification to prevent degradation by nucleases. The ribozymes cleave
 CC the c-myb sequence and can be used to prevent smooth muscle cell
 CC hyperproliferation in restenosis, especially after coronary angioplasty,
 CC and in cancers
 XX
 SQ Sequence 17 BP; 8 A; 1 C; 0 G; 0 T; 8 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 52.3%; Pred. No. 1.1e+02;
 Matches 9; Conservative 7; Mismatches 1; Indels 0; Gaps 0;

QY 4379 CAAATATTTTAAAT 4395
 DB 1 CAUAUUAUUUAAAAAU 17

RESULT 79

AAK63956
 ID AAK63956 standard; RNA; 17 BP.
 XX

AC AAK63956;
 XX

DT 20-JUL-1999 (first entry)
 XX

DE Rabbit streptolysin hammerhead target SEQ ID NO:588.
 XX

KW Arthritic condition; graft tolerance; immune response; target; cleavage;
 KM hammerhead; ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
 KW streptolysin; synovial membrane; joint; arthritis; osteoarthritis;
 KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
 KW diagnosis; ss.
 XX

OS Oryctolagus cuniculus.
 XX

PN WO9618736-A2.
 XX

PD 20-JUN-1996.
 XX

PF 22-NOV-1995; 95WO-US015516.
 XX

PR 13-DEC-1994; 94US-00354920.
 XX

PR 23-DEC-1994; 94US-00363253.
 XX

PR 23-DEC-1994; 94US-00363254.
 XX

PR 17-FEB-1995; 95US-00390850.
 XX

PR 20-APR-1995; 95US-00426124.
 XX

PR 02-MAY-1995; 95US-00432874.
 XX

PR 04-MAY-1995; 95US-00434509.
 XX

PR 07-JUL-1995; 95US-0000951P.
 XX

PR 07-JUL-1995; 95US-0000974P.
 XX

PR 05-OCT-1995; 95US-00541365.
 XX

PA (RIBO-) RIBOZYME PHARM INC.
 XX

PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
 PI Mcswiggen J, Gustofson J, Usman N, Wincoff F, Matulic-Adamic J;
 PI Karpetsky A, Thompson JD, Modak A, Burgin A;
 XX

CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention

XX SQ. Sequence 17 BP; 5 A; 2 C; 2 G; 0 T; 8 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 703 ACCAAGAGAAATATTT 719
 DB 17 ACCTAGAGAAATATTT 1

RESULT 82
 AAX69020
 ID AAX69020 standard; RNA; 17 BP.

XX AC AAX69020;

XX DT 28-JUL-1999 (first entry)

XX DE Human fil1 VEGF receptor hammethead ribozyme substrate #315.

XX KM Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KM KDR; hammethead ribozyme; hairpin ribozyme; cleavage;
 KM tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KM fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KM foetal liver kinase 1; ss.

XX OS Homo sapiens.

XX PN WO9715662-A2.

XX PD 01-MAY-1997.

XX PF 25-OCT-1996; 96WO-US017480.

XX PR 26-OCT-1995; 95US-0005974P.

XX PA 11-JAN-1996; 96US-00584040.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI (CHTR) CHIRON CORP.

XX DR Pavco P, Mcswigen J, Stinchcomb D, Escobedo J;

XX WIPI; 1997-259017/23.

XX PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.

XX PS Claim 4; Page 56; 218pp; English.

XX CC The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention

XX SQ Sequence 17 BP; 8 A; 1 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 64.7%; Pred. No. 1.1e+02;
 Matches 11; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 2282 TGTACTGTGAAAAA 2298
 DB 1 TGTUAACTUGAAAAA 17

RESULT 83
 AAF57372/C
 ID AAF57372 standard; DNA; 17 BP.

XX AC AAF57372;

XX DT 11-JUN-2001 (first entry)

XX DE Murine Cdc25A intron 10/exon 11 splice junction sequence.

XX KM Cdc25; Cdc25 phosphatase; transcription; modulator; murine; Cdc25A; exon;
 KM intron; ds.

XX OS Mus sp.

XX PN MO200120034-A2.

XX PD 22-MAR-2001.

XX PF 11-SEP-2000; 2000MO-US024838.

XX PR 13-SEP-1999; 99US-0153639P.

XX PA (BAD1) BASF AG.

XX PI Voss J, T1mm J;

XX DR WIPI; 2001-244825/25.

XX PT Assay for screening modulators of Cdc25 activity by using a cell having a
 PT recombinant Cdc25 phosphatase gene whose expression alters the
 PT transcription of a selected gene in the presence of a modulator.

XX PS Example 1; Page 15; 55pp; English.

XX CC The invention relates to a method of identifying a modulator of Cdc25
 CC activity that comprises contacting a test cell having a recombinant Cdc25
 CC phosphatase gene whose expression alters transcription of a selected
 CC gene, with a compound under conditions where recombinant Cdc25
 CC phosphatase gene is expressed and alters the transcription of a selected
 CC gene as an indication of the compound being a modulator of Cdc25-mediated
 CC transcription. The method is useful for identifying modulators of Cdc25
 CC activity. Sequences AAF57363-376 represent intron/exon splice junction
 CC sequences of the murine Cdc25A gene

XX SQ Sequence 17 BP; 4 A; 2 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2483 GATATCCTTAGAAAA 2499
 DB 17 GATTAACCTTAGAAAA 1

RESULT 84
 ADB02992/C
 ID ADB02992 standard; DNA; 17 BP.

XX AC ADB02992;

XX DT 20-NOV-2003 (first entry)

XX DE Human MD24 scanning oligonucleotide SEQ ID 3978.

XX KM Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KM zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;

KM chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KM developmental disorder; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1261758-A2.
 XX
 PD 05-FEB-2003.
 XX
 PF 30-JUL-2002; 2002EP-00016874.
 XX
 PR 02-AUG-2001; 2001US-00922181.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M, Gu Y, Nguyen C;
 XX
 DR WPI; 2003-423107/40.
 XX
 XX New zinc finger-containing proteins and nucleic acids, useful in
 PT manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MD23,
 PT MD24, MD27 or MD212, e.g. cancer.
 PS
 PS Example 8; SEQ ID NO 3978; 103pp; English.
 CC The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
 CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
 CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
 CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MD23,
 CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.
 CC
 XX
 SQ Sequence 17 BP; 2 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3937 AGGTGCTGAAAAGCCC 3953
 Db 17 AGGTGATGAAAAGCCC 1
 RESULT 85
 ACC64692
 ID ACC64692 standard; DNA; 17 BP.
 XX
 AC ACC64692;
 XX
 DT 01-JUL-2003 (first entry)
 XX
 DE Murine oligonucleotide associated with tumour suppression, SEQ ID 1939.
 XX
 KM Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
 KM tumour suppression; tumour reversion; apoptosis; virus resistance;
 KM viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
 KM schizophrenia; ss.
 XX
 OS Mus musculus.
 XX
 PN WO2003025176-A2.
 XX
 PD 27-MAR-2003.

XX
 PF 17-SEP-2002; 2002WO-IB004210.
 XX
 FR 17-SEP-2001; 2001FR-00011979.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Teلمان A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-333167/31.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumours and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 PS
 PS Disclosure; Page 257; 738pp; French.
 XX
 CC The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC68806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia
 CC
 XX
 SQ Sequence 17 BP; 1 A; 3 C; 4 G; 9 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 78 GATTGCTGCTCTTCTT 94
 Db 1 GATCTGCTGCTCTTCTT 17
 RESULT 86
 ACC64692/c
 ID ACC64692 standard; DNA; 17 BP.
 XX
 AC ACC64692;
 XX
 DT 01-JUL-2003 (first entry)
 XX
 DE Murine oligonucleotide associated with tumour suppression, SEQ ID 1939.
 XX
 KM Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
 KM tumour suppression; tumour reversion; apoptosis; virus resistance;
 KM viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
 KM schizophrenia; ss.
 XX
 OS Mus musculus.
 XX
 PN WO2003025176-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004210.
 XX
 PR 17-SEP-2001; 2001FR-00011979.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Teلمان A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-333167/31.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumours and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.

XX Disclosure; Page 257; 738bp; French.
 PS
 XX
 CC The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC6806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia
 XX
 SQ Sequence 17 BP; 1 A; 3 C; 4 G; 9 T; 0 U; 0 Other;
 QY
 Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 DB 4935 AAAGAGACACCAATC 4951
 17 AAAGAGACACCAATC 1
 RESULT 87
 AAL42963/C
 ID AAL42963 standard; DNA; 15 BP.
 AC AAL42963;
 XX
 DT 08-AUG-2002 (first entry)
 XX
 DE Human cerberus 1 (CER1) gene allele-specific oligonucleotide probe 7.
 XX
 KW Human; probe; ss; allele-specific; SNP; single nucleotide polymorphism;
 KW cerberus 1 homologue; cysteine knot superfamily; CER1; drug screening;
 KM developmental disorder; polymorphic site; CER1 haplotyping.
 XX
 OS Homo sapiens.
 XX
 PN WO200232929-A2.
 XX
 PD 25-APR-2002.
 XX
 PF 19-OCT-2001; 2001WO-US046100.
 XX
 PR 19-OCT-2000; 2000US-0241634P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Kazemi A, Shah N;
 XX
 WIPI; 2002-435527/46.
 XX
 DR Novel genetic variants of Cerberus 1 (Xenopus laevis) Homolog (Cysteine
 PT Knot Superfamily) (CER1) isogenes, useful for improving efficiency and
 PT reliability in drug development for treating developmental disorders.
 PT
 XX
 PS Claim 14; Page 13; 75bp; English.
 XX
 CC The invention relates to the identification of 13 novel polymorphic sites
 CC in the human cerberus 1 (Xenopus laevis) homologue (cysteine knot
 CC superfamily) (CER1) gene. The invention also comprises the amino acid and
 CC coding sequence of CER1. The CER1 protein is useful for screening drugs
 CC that target CER1 - for the treatment of developmental disorders. The CER1
 CC coding sequence is useful in studying the expression of CER1 isogenes,
 CC for screening and testing of drugs targeted against CER1 protein, and in
 CC testing the efficacy of therapeutic agents for treating developmental
 CC disorders. The 13 novel polymorphic sites identified in the invention are
 CC useful for haplotyping the CER1 gene of an individual. The present DNA
 CC sequence represents a human CER1 gene allele-specific oligonucleotide
 CC probe

XX
 SQ Sequence 15 BP; 6 A; 0 C; 1 G; 7 T; 0 U; 1 Other;
 QY
 Query Match 0.3%; Score 14.6; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 1e+02;
 Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 DB 4921 TTTAAATTTTCAAA 4935
 15 TTTAAATTTTCAAA 1
 RESULT 88
 AAL42984/C
 ID AAL42984 standard; DNA; 15 BP.
 AC AAL42984;
 XX
 DT 08-AUG-2002 (first entry)
 XX
 DE Human cerberus 1 (CER1) gene allele-specific oligonucleotide primer 15.
 XX
 KW Human; PCR; allele-specific; SNP; single nucleotide polymorphism; ss;
 KW cerberus 1 homologue; cysteine knot superfamily; CER1; drug screening;
 KM developmental disorder; polymorphic site; CER1 haplotyping; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200232929-A2.
 XX
 PD 25-APR-2002.
 XX
 PF 19-OCT-2001; 2001WO-US046100.
 XX
 PR 19-OCT-2000; 2000US-0241634P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Kazemi A, Shah N;
 XX
 WIPI; 2002-435527/46.
 XX
 DR Novel genetic variants of Cerberus 1 (Xenopus laevis) Homolog (Cysteine
 PT Knot Superfamily) (CER1) isogenes, useful for improving efficiency and
 PT reliability in drug development for treating developmental disorders.
 PT
 XX
 PS Claim 14; Page 13; 75bp; English.
 XX
 CC The invention relates to the identification of 13 novel polymorphic sites
 CC in the human cerberus 1 (Xenopus laevis) homologue (cysteine knot
 CC superfamily) (CER1) gene. The invention also comprises the amino acid and
 CC coding sequence of CER1. The CER1 protein is useful for screening drugs
 CC that target CER1 - for the treatment of developmental disorders. The CER1
 CC coding sequence is useful in studying the expression of CER1 isogenes,
 CC for screening and testing of drugs targeted against CER1 protein, and in
 CC testing the efficacy of therapeutic agents for treating developmental
 CC disorders. The 13 novel polymorphic sites identified in the invention are
 CC useful for haplotyping the CER1 gene of an individual. The present DNA
 CC sequence represents a human CER1 gene allele-specific oligonucleotide
 CC primer
 XX
 SQ Sequence 15 BP; 5 A; 0 C; 1 G; 8 T; 0 U; 1 Other;
 QY
 Query Match 0.3%; Score 14.6; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 1e+02;
 Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 DB 4921 TTTAAATTTTCAAA 4935
 15 TTTAAATTTTCAAA 1
 RESULT 89

AD24994/c
 ID AAD24994 standard; DNA; 15 BP.
 XX
 AC AAD24994;
 XX
 DT 12-MAR-2002 (first entry)
 XX
 DE Human AANAT gene polymorphism detecting ASO primer #8.
 XX
 KM Human; genetic variant; arylalkylamine N-acetyltransferase; AANAT gene;
 KM haplotyping; genotyping; pineal gland disorder; melatonin synthesis;
 KM gene therapy; antisense therapy; allele specific oligonucleotide;
 KM ASO primer; polymorphism; ss.
 XX
 OS Homo sapiens.
 XX
 PN MO200187909-A2.
 XX
 PD 22-NOV-2001.
 XX
 PF 18-MAY-2001; 2001MO-US016279.
 XX
 PR 18-MAY-2000; 2000US-0205068P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Choi JY, Kazemi A, Nandabalan K;
 XX
 DR WPI; 2002-055682/07.
 XX
 PT New genetic variants of human arylalkylamine N-acetyltransferase (AANAT)
 PT gene for studying expression, function of the gene and expressing AANAT
 PT protein for use in screening for drugs to treat disorders of pineal
 PT gland.
 XX
 PS Claim 16; Page 13; 67pp; English.
 XX
 CC The patent discloses novel genetic variants of the arylalkylamine N-
 CC acetyltransferase (AANAT) gene. The invention also relates to
 CC compositions and methods for haplotyping and/or genotyping the AANAT
 CC gene. Polymorphic variants of AANAT protein are useful for screening for
 CC drugs targeting the polypeptide. AANAT polynucleotides are useful for
 CC studying the expression and function of AANAT and for expressing AANAT
 CC protein for use in screening for candidate drugs to treat diseases
 CC related to AANAT activity. The methods are used to develop diagnostic
 CC tests and therapeutic treatment for disorders of pineal gland that derive
 CC from defects in melatonin synthesis. It is useful for determining whether
 CC an individual has one of the haplotypes 1-4 or the haplotype pairs. The
 CC haplotyping method is useful to validate AANAT as a candidate target for
 CC treating a specific condition or disease predicted to be associated with
 CC AANAT activity. AANAT sequences of the invention are also used in gene
 CC therapy and antisense therapy. The present DNA sequence is an allele.
 CC specific oligonucleotide (ASO) primer which is used for detecting human
 CC AANAT gene polymorphisms
 XX
 SQ Sequence 15 BP; 1 A; 3 C; 5 G; 5 T; 0 U; 1 Other;
 XX
 QY Query Match 0.3%; Score 14.6; DB 1; Length 15;
 XX
 DE Best Local Similarity 93.3%; Pred. No. 1e+02; Mismatches 0; Gaps 0;
 DE Matches 14; Conservative 1; Indels 0; Gaps 0;
 XX
 QY 3442 TGACAGCACCACAGG 3456
 XX
 DB 15 TRACAGCACCACAGG 1
 XX
 RESULT 90
 XX
 ID AAX81622/c
 XX
 AC AAX81622; DNA; 21 BP.
 XX
 AC AAX81622;
 XX
 DT 26-AUG-1999 (first entry)

XX
 DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
 XX
 KM Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
 XX
 OS Synthetic.
 OS Erythrovirus.
 XX
 PN FR2771751-A1.
 XX
 PD 04-JUN-1999.
 XX
 PF 03-DEC-1997; 97ER-00015197.
 XX
 PR 03-DEC-1997; 97ER-00015197.
 XX
 PA (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
 XX
 PI Nguyen QT, Garbarg CA, Auguste V;
 XX
 DR WPI; 1999-349543/30.
 XX
 PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.
 XX
 PS Claim 3; Page 30; 80pp; French.
 XX
 CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antipodes can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections
 XX
 SQ Sequence 21 BP; 10 A; 3 C; 0 G; 8 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 14.4; DB 1; Length 21;
 XX
 DE Best Local Similarity 93.8%; Pred. No. 2.2e+02; Mismatches 1; Gaps 0;
 DE Matches 15; Conservative 1; Indels 0; Gaps 0;
 XX
 QY 4383 TATTTTAAAAAACT 4398
 XX
 DB 21 TATTTTAAAAAACT 6
 XX
 RESULT 91
 XX
 ID AAD45233/c
 XX
 AC AAD45233 standard; DNA; 15 BP.
 XX
 AC AAD45233;
 XX
 DT 27-DEC-2002 (first entry)
 XX
 DE Human PON-1 gene polymorphism detecting ASO probe #1.
 XX
 KM Human; paroxonase 1; PON1; single nucleotide polymorphism; transgenic;
 KM SNP; drug screening; organo-phosphorous metabolism; target validation;
 KM atherosclerosis; type II diabetes; gene therapy; antilipemic; probe;
 KM allele specific oligonucleotide; ASO; ss.
 XX
 OS Homo sapiens.
 XX
 PN MO200266680-A1.
 XX
 PD 29-AUG-2002.
 XX
 PF 06-DEC-2001; 2001MO-US046896.
 XX
 PR 16-FEB-2001; 2001MO-US005126.
 XX

XX The invention describes an isolated polynucleotide comprising a
CC nucleotide sequence which is a polymorphic variant of a reference
CC sequence for the aldehyde dehydrogenase 5 family, member A1 (succinate-
CC semialdehyde dehydrogenase) (ALDH5A1) gene or its fragment. The
CC polypeptide is useful for screening for drugs targeting it by contacting
CC the ALDH5A1 polymorphic variant with a candidate agent and assaying for
CC binding activity. The polypeptide and haplotypes are useful for
CC identifying an association between a trait such as a clinical response to
CC a drug targeting ALDH5A1 and a haplotype of ALDH5A1 gene. Transgenic animals
CC are also useful for studying expression of the ALDH5A1 isogenes in vivo,
CC for in vivo screening and testing of drugs against ALDH5A1 protein and
CC for testing the efficacy of therapeutic agents and compounds for 4-
CC hydroxybutyrate aciduria and metabolic diseases in a biological system.
CC Antibodies are useful for diagnostic and prognostic formats and
CC therapeutic methods, for immunoprecipitating the polypeptide from
CC solution, for detecting ALDH5A1 protein isoforms in biological samples,
CC frozen tissue sections, for use in immunocytochemical,
CC immunohistochemical and immunofluorescence techniques. The polynucleotide
CC is useful for gene therapy and antisense gene therapy. This sequence is
CC an allele specific oligonucleotide (ASO) primer used to detect
CC polymorphisms in the ALDH5A1 gene described in the method of the
CC invention
XX
SQ Sequence 15 BP; 3 A; 10 C; 0 G; 1 T; 0 U; 1 Other;

Query Match 0.3%; Score 13.6; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 1.4e+02;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 2152 GGGGAGCGGTGGG 2165
|:|||||
DB 15 GGGGAGCGGTGGG 2

RESULT 94
AAK81647/c
ID AAK81647 standard; DNA; 30 BP.
XX
AC AAK81647;
XX
DT 26-AUG-1999 (first entry)
XX
DE Probe used to isolate erythrovirus V9 nucleotide sequences.
XX
KM Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX erythrovirus screening; typing; immunoassay; probe; ss.
XX
OS Synthetic.
OS Erythrovirus.
XX
PN FR2771751-A1.
XX
PD 04-JUN-1999.
XX
PF 03-DEC-1997; 97FR-00015197.
XX
PR 03-DEC-1997; 97FR-00015197.
XX
PA (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
PI Nguyen QT, Garbarg CA, Auguste V;
XX WPI, 1999-349543/30.
XX
PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.
XX
PS Claim 3; Page 37; 80pp; French.
XX
CC AAK81630-X81666 represent probes used to isolate erythrovirus V9
CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
CC polynucleotide sequences (AAK81580) can be used for differential

CC diagnosis of erythrovirus (parvovirus) infections by a combination of
CC amplification and hybridisation assay. The probes can also be used to
CC assess susceptibility to erythrovirus infection and for erythrovirus
CC screening and typing. The antibodies can be used in immunoassays for
CC diagnosis of erythrovirus V9 infections
XX
SQ Sequence 30 BP; 8 A; 4 C; 6 G; 12 T; 0 U; 0 Other;

Query Match 0.3%; Score 13.2; DB 1; Length 30;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3769 AATGTACACCTTTGTA 3786
||| ||| ||| ||| |||
DB 30 AATGTACAAACTTTGTA 13

RESULT 95
ABC44830
ID ABC44830 standard; DNA; 13 BP.
XX
AC ABC44830;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 44847 for detecting SNP TSC0013119.
XX
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-1B000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX

XX (EPIG-) EPIGENOMICS AG.
XX
PA Olek A, Piepenbrock C, Berlin K;
XX
PI WPI, 2001-657177/75.
XX
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PS Claim 1, SEQ ID NO 44847; 29pp + Sequence Listing; German.
XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2411 TTTATGAAAAAG 2423

PA (GENA-) GENNAISSANCE PHARM INC.
 XX Anastrasio AE, Chew A, Choi JY, Denton RR, Nandabalan K, Parks KE;
 PI Stephens JC;
 XX WPI; 2002-682769/73.
 DR
 XX New genetic variants of human paraoxonase 1 (PON1) gene with
 PT polymorphisms, useful for treating disorders associated with PON1 isoenzyme
 PT activity e.g. atherosclerosis or diabetes, or for screening drugs for
 PT treating these diseases.
 XX
 PS Claim 15; Page 15; 118pp; English.
 CC The invention relates to methods for haplotyping human paraoxonase 1
 CC (PON1) gene. It also relates to the single nucleotide polymorphisms (SNP)
 CC in PON-1 gene. Polymorphic variants of the PON1 gene are useful in
 CC studying the expression and function of PON1, and in expressing PON1
 CC proteins for use in screening candidate drugs to treat diseases
 CC associated with PON1 activity, e.g. disorders of lipid and organo-
 CC phosphorous metabolism such as atherosclerosis or type II diabetes. They
 CC are also used in gene therapy. Establishing PON1 haplotype or haplotype
 CC pair of an individual is useful for improving the efficiency and
 CC reliability of several steps including target validation, in the
 CC discovery and development of drugs for treating diseases associated with
 CC PON1 activity. Transgenic animals are useful for studying expression of
 CC the PON1 isoenzymes in vivo. The present sequence is an allele specific
 CC oligonucleotide (ASO) probe used to detect human PON-1 gene polymorphisms
 CC
 SQ Sequence 15 BP; 4 A; 3 C; 5 G; 2 T; 0 U; 1 Other;
 OY
 Query Match 0.3%; Score 13.6; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 1.4e+02;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 DB 4549 TCCTCATGCAGCTG 4562
 14 TCCTCAGCAGCTG 1
 RESULT 92
 ID ABA9286 standard; DNA; 15 BP.
 AC ABA9286;
 XX
 DT 13-MAY-2002 (first entry)
 DE Human ALDH5 allele-specific oligonucleotide SEQ ID NO 6.
 XX
 KW ALDH5; human; gene; polymorphism; haplotype; aldehyde dehydrogenase 5;
 KW binding affinity; drug targeting; alcoholism; alcohol-induced disorder;
 KW antialcoholic; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192279-A2.
 PD 06-DEC-2001.
 XX
 PF 29-MAY-2001; 2001WO-US017253.
 XX
 PR 26-MAY-2000; 2000US-0207506P.
 XX
 PA (GENA-) GENNAISSANCE PHARM INC.
 XX
 PI Duda A, Finkel K, Kazemi A, Messer C, Sanchis A;
 XX
 DR WPI; 2002-122054/16.
 XX New genetic variants with polymorphisms in the aldehyde dehydrogenase 5
 PT (ALDH5) gene, useful for studying the function of ALDH5, and for
 PT expressing ALDH5 protein which is useful in screening drugs for treating

PT ALDH5-related diseases.
 XX
 PS Claim 17; Page 75; 96pp; English.
 XX
 CC This invention describes a novel isolated genes and haplotypes of the
 CC human aldehyde dehydrogenase 5 (ALDH5) gene containing polymorphic sites.
 CC The polymorphic ALDH5 variant is useful in studying the effect of the
 CC variation on the biological activity of ALDH5 and on the binding affinity
 CC of candidate drugs targeting ALDH5 for the treatment of alcoholism and
 CC alcohol-induced disorders. Polynucleotides comprising a polymorphic gene
 CC variant or fragment may be used for therapeutic purposes. ALDH5 protein
 CC isoforms may be used in assays to measure the binding affinities of one
 CC or more candidate drugs targeting the ALDH5 protein. ALDH5 proteins may
 CC be used to generate antibodies. Haplotyping method can be used by
 CC scientists to validate ALDH5 as a candidate target for treating a
 CC specific condition or disease predicted to be associated with ALDH5
 CC activity, and in the design of clinical trials of candidate drugs for
 CC treating a specific condition or disease predicted to be associated with
 CC ALDH5 activity. Information on polymorphisms on the ALDH5 gene can be
 CC applied for studying the biological function of ALDH5 as well as in
 CC identifying drugs targeting this protein for the treatment of disorders
 CC related to its abnormal expression or function. The products of the
 CC invention have antialcoholic activity. This sequence represents a human
 CC ALDH5 allele-specific oligonucleotide described in the disclosure of the
 CC invention
 XX
 SQ Sequence 15 BP; 2 A; 1 C; 6 G; 5 T; 0 U; 1 Other;
 OY
 Query Match 0.3%; Score 13.6; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 1.4e+02;
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 DB 494 ATTTTACTGCGGCG 507
 2 ATTTTATGTGGCGG 15
 RESULT 93
 ID AAS99335/c
 XX AAS99335 standard; DNA; 15 BP.
 AC AAS99335;
 XX
 DT 12-MAR-2002 (first entry)
 DE Aldehyde dehydrogenase 5 family, member A1, oligonucleotide #28.
 XX
 KW Aldehyde dehydrogenase 5 family member A1; ALDH5A1;
 KW succinate-semialdehyde dehydrogenase; gene therapy; primer;
 KW antisense technology; allele specific oligonucleotide; ASO;
 KW 4-hydroxybutyric aciduria; metabolic disease; transgenic animal; ss.
 XX
 OS Synthetic.
 XX
 PN WO200190119-A2.
 PD 29-NOV-2001.
 XX
 PF 21-MAY-2001; 2001WO-US016558.
 XX
 PR 19-MAY-2000; 2000US-0205849P.
 XX
 PA (GENA-) GENNAISSANCE PHARM INC.
 XX
 PI Klem SE, Koshy B, Tanguay DA;
 XX
 DR WPI; 2002-089912/12.
 XX New genetic variants of human aldehyde dehydrogenase 5 family, member A1,
 PT ALDH5A1 gene for treating metabolic diseases and for expressing ALDH5A1
 PT protein useful in identifying drugs to treat 4-hydroxybutyric aciduria.
 XX
 PS Claim 16; Page 14; 151pp; English.

PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 87135; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 0 C; 1 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 1193 AAAAAATGATGCT 1205
DB 1 AAAAAATGATGCT 13
XX
XX RESULT 99
ABC87968/c
XX ID ABC87968 standard; DNA; 13 BP.
XX
XX ABC87968;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 87985 for detecting SNP TSC0022114.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 87985; 29pp + Sequence Listing; German.

XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 0 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 2875 AAAAAATGAAAAAT 2887
DB 13 AAAAAATGAAAAAT 1
XX
XX RESULT 100
ABF74977
XX ID ABF74977 standard; DNA; 13 BP.
XX
XX ABF74977;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 174974 for detecting SNP TSC0043498.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 174974; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

```
XX Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3310 TTTCACCATTA 3322
DB 1 TTTCACCATTA 13
RESULT 101
ABH02517
ID ABH02517 standard; DNA; 13 BP.
AC ABH02517;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 202494 for detecting SNP TSC0049770.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 202494; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;
QY
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
DB 1284 TAAAAAACACC 1296
DB 1 TAAAAAACACC 13
RESULT 102
```

```
ABF83464/c
ID ABF83464 standard; DNA; 13 BP.
XX
XX ABF83464;
AC
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 183461 for detecting SNP TSC0045298.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 183461; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4391 AAAATACTACAC 4403
DB 13 AAAATACTACAC 1
RESULT 103
ABH45580
ID ABH45580 standard; DNA; 13 BP.
AC ABH45580;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 245557 for detecting SNP TSC0059958.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

```

OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 245557; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 0 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2409 AATTTATGAAA 2421
XX |||||||
XX 1 AATTTATGAAA 13
XX
XX RESULT 104
XX ABH61839
XX ID ABH61839 standard; DNA; 13 BP.
XX
XX ABH61839;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 261816 for detecting SNP TSC0063522.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX
XX
XX

```

```

XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 261816; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 1 C; 0 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 674 TTAACCTTAATT 686
XX |||||||
XX 1 TTAACCTTAATT 13
XX
XX RESULT 105
XX ABC93518/c
XX ID ABC93518 standard; DNA; 13 BP.
XX
XX ABC93518;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 93535 for detecting SNP TSC0023374.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 93535; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX

```

CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 0 G; 11 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2874 AAAATATATAAAA 2886
DB 13 AAAATATATAAAA 1

RESULT 106
ABF93196/c
ID ABF93196 standard; DNA; 13 BP.
XX
AC ABF93196;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 139193 for detecting SNP TSC0034867.
XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.

XX W0200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 139193; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX

XX Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3487 TAAATACCATAT 3499
DB 13 TAAATACCATAT 1

RESULT 107
ABH17341
ID ABH17341 standard; DNA; 13 BP.
XX
AC ABH17341;
XX
DT 22-FEB-2002 (first entry)
XX

DE Oligonucleotide SEQ ID NO 217318 for detecting SNP TSC0052834.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX W0200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 217318; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX

XX Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2539 TAACTTAAAC 2551
DB 1 TAACTTAAAC 13

RESULT 108
ABF96463/c
ID ABF96463 standard; DNA; 13 BP.
XX
AC ABF96463;
XX

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;

DT 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 196460 for detecting SNP TSC0006585.
DE
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX MO200177384-A2.
PN
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIC-) EPIDENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 196460; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 144 TTTAATGTTATAT 156
DB 13 TTTAATGTTATAT 1
XX
XX
RESULT 109
ABH03634/C
ID ABH03634 standard; DNA; 13 BP.
XX
XX
XX ABH03634;
AC
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 203611 for detecting SNP TSC0049989.
DE
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX MO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD

XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIC-) EPIDENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 203611; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 13 BP; 1 A; 0 C; 4 G; 8 T; 0 U; 0 Other;
XX
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 2343 AAACCACTAACAA 2355
DB 13 AAACCACTAACAA 1
XX
XX
RESULT 110
ABH44073/C
ID ABH44073 standard; DNA; 13 BP.
XX
XX
XX ABH44073;
AC
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 244050 for detecting SNP TSC0059546.
DE
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX MO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIC-) EPIDENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

PT methylation status.
XX
XX Claim 1; SEQ ID NO 244050; 29bp + Sequence Listing; German.
XX
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 1 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1194 AATATAATATGTA 1206
Db 13 AATATAATATGTA 1

RESULT 111
ABC99979
ID ABC99979 standard; DNA; 13 BP.
XX
XX ABC99979;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 99996 for detecting SNP TSC0024859.
DE
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX MO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIC-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX MPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
PT
XX
XX Claim 1; SEQ ID NO 99996; 29bp + Sequence Listing; German.
XX
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 13 BP; 2 A; 10 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4717 CCCACCGCCACC 4729
Db 1 CCCACCGCCACC 13

RESULT 112
ABC85489/C
ID ABC85489 standard; DNA; 13 BP.
XX
XX ABC85489;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 85506 for detecting SNP TSC0021486.
DE
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX MO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIC-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX MPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
PT
XX
XX Claim 1; SEQ ID NO 85506; 29bp + Sequence Listing; German.
XX
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 13 BP; 6 A; 1 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1206 AATATAATATG 1218
Db 13 AATATAATATG 1

```
RESULT 113
ABC61205/C
ID ABC61205 standard; DNA; 13 BP.
XX
AC ABC61205;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 61222 for detecting SNP TSC0016301.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX MPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 61222; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 9 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 916 TGTGGAGGGGAG 928
XX |||||||
XX 13 TGTGAGGGGAG 1
XX
XX RESULT 114
ABC38594
ID ABC38594 standard; DNA; 13 BP.
XX
XX ABC38594;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 38611 for detecting SNP TSC0011898.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
```

```
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX MPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 38611; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3760 TTTTATGAATG 3772
XX |||||||
XX 1 TTTTATGAATG 13
XX
XX RESULT 115
ABF83465
ID ABF83465 standard; DNA; 13 BP.
XX
XX ABF83465;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 183462 for detecting SNP TSC0045298.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
```

PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI, 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1, SEQ ID NO 183462; 29pp + Sequence Listing, German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABP00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4391 AAAAACTACCCAC 4403
 DB 1 AAAAACTACCCAC 13
 XX
 RESULT 116
 ABC49034
 ID ABC49034 standard; DNA; 13 BP.
 XX
 AC ABC49034;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 49051 for detecting SNP TSC0013913.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI, 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1, SEQ ID NO 49051; 29pp + Sequence Listing, German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABP00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2857 AGATGAAGAAATTC 2869
 DB 1 AGATGAAGAAATTC 13
 XX
 RESULT 117
 ABH02516/c
 ID ABH02516 standard; DNA; 13 BP.
 XX
 AC ABH02516;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 202493 for detecting SNP TSC0049770.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI, 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1, SEQ ID NO 202493; 29pp + Sequence Listing, German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABP00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

```
Query Match      0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1284 TAAAAAACACC 1296
DB      13 TAAAAAACACC 1

RESULT 118
ABF80047/c
ID      ABF80047 standard; DNA; 13 BP.
XX
XX
AC      ABF80047;
XX
XX
DT      22-FEB-2002 (first entry)
XX
DE      Oligonucleotide SEQ ID NO 180044 for detecting SNP TSC0044583.
XX
XX
KW      SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX
OS      Homo sapiens.
XX
XX
PN      WO200177384-A2.
XX
XX
PD      18-OCT-2001.
XX
XX
PF      06-APR-2001; 2001WO-IB000713.
XX
XX
PR      07-APR-2000; 2000DE-01019173.
XX
XX
PA      (EPIC-) EPIGENOMICS AG.
XX
PI      Olek A, Piepenbrock C, Berlin K;
XX
PI      WPI; 2001-657177/75.
XX
PT      Set of oligonucleotides, useful for diagnosis and cell typing, is
PT      designed to detect single-nucleotide polymorphisms and cytosine
PT      methylation status.
XX
XX
PS      Claim 1; SEQ ID NO 180044; 29pp + Sequence Listing; German.
XX
XX
CC      This invention describes novel oligonucleotide primers or peptide nucleic
CC      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC      and cytosine methylation status in chemically pretreated genomic DNA. The
CC      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC      range of diseases including immune system, gastrointestinal, respiratory,
CC      central nervous system, cardiovascular and metabolic disorders. The
CC      oligomers are also used for detecting cell type differentiation. ABC00010
CC      -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC      represent the oligomers described in the invention. NOTE: The sequence
CC      data for this patent did not form part of the printed specification, but
CC      was obtained in electronic format from WIPO at
CC      ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ      Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX
Query Match      0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3463 GTGTATGTTAGTG 3475
DB      13 GTGTATGTTAGTG 1

RESULT 119
ABH48162
ID      ABH48162 standard; DNA; 13 BP.
```

```
XX
XX
AC      ABH48162;
XX
XX
DT      22-FEB-2002 (first entry)
XX
DE      Oligonucleotide SEQ ID NO 248139 for detecting SNP TSC0060641.
XX
XX
KW      SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX
OS      Homo sapiens.
XX
XX
PN      WO200177384-A2.
XX
XX
PD      18-OCT-2001.
XX
XX
PF      06-APR-2001; 2001WO-IB000713.
XX
XX
PR      07-APR-2000; 2000DE-01019173.
XX
XX
PA      (EPIC-) EPIGENOMICS AG.
XX
PI      Olek A, Piepenbrock C, Berlin K;
XX
PI      WPI; 2001-657177/75.
XX
XX
PT      Set of oligonucleotides, useful for diagnosis and cell typing, is
PT      designed to detect single-nucleotide polymorphisms and cytosine
PT      methylation status.
XX
XX
PS      Claim 1; SEQ ID NO 248139; 29pp + Sequence Listing; German.
XX
XX
CC      This invention describes novel oligonucleotide primers or peptide nucleic
CC      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC      and cytosine methylation status in chemically pretreated genomic DNA. The
CC      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC      range of diseases including immune system, gastrointestinal, respiratory,
CC      central nervous system, cardiovascular and metabolic disorders. The
CC      oligomers are also used for detecting cell type differentiation. ABC00010
CC      -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC      represent the oligomers described in the invention. NOTE: The sequence
CC      data for this patent did not form part of the printed specification, but
CC      was obtained in electronic format from WIPO at
CC      ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ      Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX
Query Match      0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      143 GTTTATGTTATA 155
DB      1 GTTTATGTTATA 13

RESULT 120
ABH55808
ID      ABH55808 standard; DNA; 13 BP.
XX
XX
AC      ABH55808;
XX
XX
DT      22-FEB-2002 (first entry)
XX
DE      Oligonucleotide SEQ ID NO 255785 for detecting SNP TSC0062332.
XX
XX
KW      SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX
OS      Homo sapiens.
XX
```

PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PS (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 255785; 29bp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 0 G; 9 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 151 TTATATTTTAAAT 163
DB 1 TTATATTTTAAAT 13
XX
RESULT 121
ABC29747/c
ID ABC29747 standard; DNA; 13 BP.
XX
AC ABC29747;
XX
XX 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 29764 for detecting SNP TSC0008996.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
DR

XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 29764; 29bp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 94 TTTGAATTTTGG 106
DB 13 TTTGAATTTTGG 1
XX
RESULT 122
ABC15877
ID ABC15877 standard; DNA; 13 BP.
XX
AC ABC15877;
XX
XX 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 15884 for detecting SNP TSC0003503.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 15884; 29bp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4923 TAAATTTCAA 4935

DB 1 TAAATTTCAA 13

RESULT 123
ABF26254
ID ABF26254 standard; DNA; 13 BP.

XX ABF26254;

AC 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 126251 for detecting SNP TSC0031586.

XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX MPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1, SEQ ID NO 126251; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2213 AATTAGAGATT 2225
DB 1 AATTAGAGATT 13

RESULT 124

ABH40445/c
ID ABH40445 standard; DNA; 13 BP.

XX ABH40445;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 240422 for detecting SNP TSC0058645.

XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX MPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1, SEQ ID NO 240422; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2327 TTGTAGATTATGA 2339

DB 13 TTGTAGATTATGA 1

RESULT 125

ABH45581/c
ID ABH45581 standard; DNA; 13 BP.

XX ABH45581;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 245558 for detecting SNP TSC0059958.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX MO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 245558; 29pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, cardiovascular, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 1 C; 0 G; 7 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2409 AATTTTATGAAA 2421
Db 13 AATTTTATGAAA 1
XX
XX RESULT 126
ABC87119/c
ID ABC87119 standard; DNA; 13 BP.
AC ABC87119;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 87136 for detecting SNP TSC0021905.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX MO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX

XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 87136; 29pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 1 C; 0 G; 9 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1193 AAAATTAATAGT 1205
Db 13 AAAATTAATAGT 1
XX
XX RESULT 127
ABC88723
ID ABC88723 standard; DNA; 13 BP.
AC ABC88723;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 88740 for detecting SNP TSC0022299.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX MO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX

PS Claim 1; SEQ ID NO 88740; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a CC range of diseases including immune system, gastrointestinal, respiratory, CC central nervous system, cardiovascular and metabolic disorders. The CC oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 CC represent the oligomers described in the invention. NOTE: The sequence CC data for this patent did not form part of the printed specification, but CC was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 6 A; 0 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4383 TATTTTAAAAAT 4395
 |||||
 1 TATTTTAAAAAT 13

Db
 RESULT 128
 ABC88723/c
 ID ABC88723 standard; DNA; 13 BP.
 XX
 AC ABC88723;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 88740 for detecting SNP TSC0022299.
 XX
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 88740; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a CC range of diseases including immune system, gastrointestinal, respiratory, CC central nervous system, cardiovascular and metabolic disorders. The CC oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 CC represent the oligomers described in the invention. NOTE: The sequence CC data for this patent did not form part of the printed specification, but CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 6 A; 0 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4384 ATTTTAAAAATA 4396
 |||||
 13 ATTTTAAAAATA 1

Db
 RESULT 129
 ABF26255/c
 ID ABF26255 standard; DNA; 13 BP.
 XX
 AC ABF26255;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 126252 for detecting SNP TSC0031588.
 XX
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 126252; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a CC range of diseases including immune system, gastrointestinal, respiratory, CC central nervous system, cardiovascular and metabolic disorders. The CC oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 CC represent the oligomers described in the invention. NOTE: The sequence CC data for this patent did not form part of the printed specification, but CC was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2213 AATTAGAGAGTT 2225
 |||||
 13 AATTAGAGAGTT 1

Db


```

RESULT 130
ABF35252/c
ID ABF35252 standard; DNA; 13 BP.
XX
AC ABF35252;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 135249 for detecting SNP TSC0033736.
XX
KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 135249; 29bp + Sequence listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4389 TAAAAATCTACC 4401
DB 13 TAAAAATCTACC 1
XX
RESULT 131
ABF96986
ID ABF96986 standard; DNA; 13 BP.
XX
AC ABF96986;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 196983 for detecting SNP TSC0008717.
XX
KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

```

XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 196983; 29bp + Sequence listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 635 TATTTAATATG 647
DB 1 TATTTAATATG 13
XX
RESULT 132
ABF76958/c
ID ABF76958 standard; DNA; 13 BP.
XX
AC ABF76958;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 176955 for detecting SNP TSC0043904.
XX
KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX

```

PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 176955; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4374 CCCCTCAATATT 4386
DB 13 CCCCTCAATATT 1
XX
RESULT 133
ABH05853/c
XX ID ABH05853 standard; DNA; 13 BP.
XX
AC ABH05853;
XX
DT 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 205830 for detecting SNP TSC0050445.
XX
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 205830; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligomers are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 U; 0 Other;

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4415 ATTGGAGGTATTA 4427
DB 13 ATTGGAGGTATTA 1
XX
RESULT 134
ABF63756
XX ID ABF63756 standard; DNA; 13 BP.
XX
AC ABF63756;
XX
DT 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 163753 for detecting SNP TSC0041141.
XX
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 163753; 29pp + Sequence Listing; German.
XX
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 0 C; 1 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 13; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1186 ATTAAGAAATA 1198

DB 1 ATTAAGAAATA 13

RESULT 135

ABH43913/C

ID ABH43913 standard; DNA; 13 BP.

AC ABH43913;

DE 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 243890 for detecting SNP TSC0059498.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

XX designed to detect single-nucleotide polymorphisms and cytosine

XX methylation status.

XX Claim 1; SEQ ID NO 243890; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic

XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

XX and cytosine methylation status in chemically pretreated genomic DNA. The

XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a

XX range of diseases including immune system, gastrointestinal, respiratory,

XX central nervous system, cardiovascular and metabolic disorders. The

XX oligomers are also used for detecting cell type differentiation. ABC00010

XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

XX represent the oligomers described in the invention. NOTE: The sequence

XX data for this patent did not form part of the printed specification, but

XX CC was obtained in electronic format from WIPO at

XX ftp.wipo.int/pub/published_pct_sequences

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 262130 for detecting SNP TSC0063598.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is

XX designed to detect single-nucleotide polymorphisms and cytosine

XX methylation status.

XX Claim 1; SEQ ID NO 262130; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic

XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

XX and cytosine methylation status in chemically pretreated genomic DNA. The

XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a

XX range of diseases including immune system, gastrointestinal, respiratory,

XX central nervous system, cardiovascular and metabolic disorders. The

XX oligomers are also used for detecting cell type differentiation. ABC00010

XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

XX represent the oligomers described in the invention. NOTE: The sequence

XX data for this patent did not form part of the printed specification, but

XX CC was obtained in electronic format from WIPO at

XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 4 A; 1 C; 0 G; 8 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 13; DB 1; Length 13;

XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;

XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX OY 4802 AGAATTAATA 4814

XX DB 13 AGAATTAATA 1

XX RESULT 137

XX ABH62479/C

XX ID ABH62479 standard; DNA; 13 BP.

XX AC ABH62479;

XX DE 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 262456 for detecting SNP TSC0063663.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

```

PD 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 262456; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 142 TGTTTATGTTAT 154
XX |||||
XX 13 TGTTTATGTTAT 1
XX
RESULT 138
ABC49035/c
XX ID ABC49035 standard; DNA; 13 BP.
XX
XX ABC49035;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 49052 for detecting SNP TSC0013913.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX

```

```

PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 49052; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2857 AGATGAGGATG 2869
XX |||||
XX 13 AGATGAGGATG 1
XX
RESULT 139
ABC01020/c
XX ID ABC01020 standard; DNA; 13 BP.
XX
XX ABC01020;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 1011 for detecting SNP TSC0000334.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 1011; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX

```

CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 0 C; 0 G; 11 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2872 AAAAAATATATAA 2884

DB 13 AAAAAATATATAA 1

RESULT 140
ABC51623/c
ID ABC51623 standard; DNA; 13 BP.

XX ABC51623;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 51640 for detecting SNP TSC0014402.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 51640; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 159 TAAATTAATTGGA 171

|||||

DB 13 TAAATTAATTGGA 1

RESULT 141

XX ABC29746 standard; DNA; 13 BP.

XX ABC29746;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 29763 for detecting SNP TSC0008896.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 29763; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 94 TTGGAATTTTGG 106

DB 1 TTGGAATTTTGG 13

RESULT 142

XX ABC85488 standard; DNA; 13 BP.

XX ABC85488;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 85505 for detecting SNP TSC0021486.

KM SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 BR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 85505; 29pp + Sequence listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 6 A; 0 C; 1 G; 6 T; 0 U; 0 Other;
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1206 AAAATTATTATG 1218
 DB 1 AAAATTATTATG 13
 RESULT 143
 ABEF22170/c
 ID ABEF22170 standard; DNA; 13 BP.
 AC ABEF22170;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 122167 for detecting SNP TSC0030535.
 XX
 KW SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.

XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 122167; 29pp + Sequence listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4188 CTTACTCCCTTA 4200
 DB 13 CTTACTCCCTTA 1
 RESULT 144
 ABEF22171
 ID ABEF22171 standard; DNA; 13 BP.
 AC ABEF22171;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 122168 for detecting SNP TSC0030535.
 XX
 KW SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 122168; 29pp + Sequence listing; German.

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4880 AAAATAAGCCTTAA 4896
|||||
Db 23 AAAATTAAAGCATTAA 7

RESULT 288
ABF42913
ID ABF42913 standard; DNA; 13 BP.
XX
AC ABF42913;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 142910 for detecting SNP TSC0035848.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
PI Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PS (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI MPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
PS Claim 1; SEQ ID NO 142910; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SO Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.2%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4925 AAAATTTCAAA 4936
|||||
Db 2 AAAATTTCAAA 13

RESULT 289
ABF42912/C
ID ABF42912 standard; DNA; 13 BP.
XX
AC ABF42912;
XX
XX

DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 142909 for detecting SNP TSC0035848.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
PI Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PS (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI MPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
PS Claim 1; SEQ ID NO 142909; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SO Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.2%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4925 AAAATTTCAAA 4936
|||||
Db 12 AAAATTTCAAA 1

RESULT 290
ABC71205/C
ID ABC71205 standard; DNA; 13 BP.
XX
AC ABC71205;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 71222 for detecting SNP TSC0018455.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
PI Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.

```

XX PS Example 2, Page 42; 14bp; English.
CC CC The present invention describes a method for detecting a human parvovirus
CC B19 infection in a biological sample. The method comprises reacting the
CC isolated parvovirus B19 nucleic acid with a first oligonucleotide
CC consisting of a first primer containing a complexing sequence
CC sufficiently complementary to the 3'-terminal portion of the RNA target
CC sequence to complex with. Also described: (1) amplifying a target
CC parvovirus B19 nucleotide sequence; (2) a polynucleotide comprising one
CC of 47 700 base pair sequences (see AB259549 to AB259569, and AB259604 to
CC AB259629); (3) a polynucleotide comprising either of 2 4678 base pair
CC sequences (see AB259570 and AB259571); (4) an oligonucleotide primer
CC consisting of a promoter region recognised by a DNA-dependent RNA
CC polymerase operably linked to a human parvovirus B19-specific complexing
CC sequence of 10-75 nucleotides; (5) an oligonucleotide probe comprising a
CC parvovirus B19-specific hybridising sequence of 10-50 nucleotides linked
CC to an acridinium ester label; and (6) a diagnostic test kit comprising an
CC oligonucleotide primer of (4), and instructions for conducting the
CC diagnostic test. The method is useful for detecting parvovirus infection
CC in a biological sample, such as in blood and plasma products, to prevent
CC transmission of the virus through blood and plasma derivatives or by
CC close personal contact. AB259549 to AB259634 and AB259634 to AB259634
CC represent sequences used in the exemplification of the present invention
XX SQ Sequence 24 BP; 10 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match      0.3%; Score 12.6; DB 1; Length 24;
Best Local Similarity 78.9%; Pred. No. 3.2e+02;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 560 AAGGCTATCATTCATCT 578
Db 20 AGGCTTTTCATTCATCT 2

RESULT 286
AAK57350/c
ID AAK57350 standard; DNA; 26 BP.
XX AC AAK57350;
XX DT 22-JUL-1999 (first entry)
XX DE Parvovirus detecting oligonucleotide 3.
XX KM Detection; viral concentration; blood plasma; serum; PCR sensitivity;
XX KM extraction; amplification; detection; PCR primer; ss.
XX OS Synthetic.
XX OS Parvovirus.
XX PH Key
XX FT modified_base 1 Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT modified_base 26 /note= "5'-end modified by FAM group"
XX FT modified_base 26 /*tag= b
XX FT modified_base 26 /note= "3'-end modified by TMRA group"
XX PN BP922771-A2.
XX PD 16-JUN-1999.
XX PF 03-NOV-1998; 98EP-00120799.
XX PR 28-NOV-1997; 97DE-01052898.
XX PA (CENT-) CENTEON PHARMA GMBH.
XX PI Weimer T, Groener A;
XX DR WPI; 1999-329400/28.

```

```

XX PS Process to detect high concentrations of virus in blood plasma or serum,
XX PT by restricting the sensitivity of PCR.
XX PS Example 1; Page 7; 8pp; German.
CC CC This invention describes a novel method for detection of high viral
CC concentrations in blood plasma or serum by restriction of PCR sensitivity
CC through suboptimal nucleic acid extraction, amplification and detection
CC conditions. The method described is used to detect high concentrations of
CC parvovirus in the blood plasma or serum of humans. The method detects
CC parvovirus DNA with a content in humans of greater than 106 to 107 genome
CC equivalents
XX SQ Sequence 26 BP; 5 A; 1 C; 10 G; 10 T; 0 U; 0 Other;

Query Match      0.2%; Score 12.4; DB 1; Length 26;
Best Local Similarity 72.7%; Pred. No. 3.2e+02;
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Oy 1802 ATGCCCTCCACCGAGATCTCCA 1823
Db 22 ATACCTTCATCCAGACACCA 1

RESULT 287
AAK81615/c
ID AAK81615 standard; DNA; 23 BP.
XX AC AAK81615;
XX DT 26-AUG-1999 (first entry)
XX DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
XX KM Erythrovirus V9; differential diagnosis; parvovirus; infection;
XX KM erythrovirus screening; typing; immunoassay; PCR primer; ss.
XX OS Synthetic.
XX OS Erythrovirus.
XX PN FR2771751-A1.
XX PD 04-JUN-1999.
XX PF 03-DEC-1997; 97FR-00015197.
XX PR 03-DEC-1997; 97FR-00015197.
XX PA (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
XX PI Nguyen QT, Garbarg CA, Auguste V;
XX DR WPI; 1999-349543/30.
XX PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX PT diagnosis of its infections.
XX PS Claim 3; Page 28; 80pp; French.
XX CC AAK81588-X81630 represent PCR primers used to amplify erythrovirus V9
XX CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
XX CC polynucleotide sequences (AAK81580) can be used for differential
XX CC diagnosis of erythrovirus (parvovirus) infections by a combination of
XX CC amplification and hybridisation assay. The probes can also be used to
XX CC assess susceptibility to erythrovirus infection and for erythrovirus
XX CC screening and typing. The antibodies can be used in immunoassays for
XX CC diagnosis of erythrovirus V9 infections
XX SQ Sequence 23 BP; 7 A; 1 C; 2 G; 13 T; 0 U; 0 Other;

Query Match      0.2%; Score 12.2; DB 1; Length 23;
Best Local Similarity 82.4%; Pred. No. 3.4e+02;

```


KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 258929; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and AB100010-AB12073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2538 GTAATCTTAAAA 2550
Db 13 RTAATCTTAAAA 1
XX
RESULT 284
ABH59162
ID ABH59162 standard; DNA; 13 BP.
XX
AC ABH59162;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 259139 for detecting SNP TSC0062961.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX

XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 259139; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and AB100010-AB12073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 1 G; 6 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3759 ATTTTATGAAT 3771
Db 1 ATTTTATGAAT 13
XX
RESULT 285
ABZ59580/C
ID ABZ59580 standard; DNA; 24 BP.
XX
AC ABZ59580;
XX
XX 22-APR-2003 (first entry)
XX
DE Human parvovirus B19 VP2 PCR primer VP2-5 SEQ ID NO:38.
XX
KW Human parvovirus B19; parvovirus B19; infection; virus; blood; plasma;
KW PCR primer; ss.
XX
OS B19 virus.
OS Synthetic.
XX
PN WO2003002753-A2.
XX
PD 09-JAN-2003.
XX
PF 28-JUN-2002; 2002WO-US020684.
XX
PR 28-JUN-2001; 2001US-0302077P.
PR 19-MAR-2002; 2002US-0365956P.
PR 29-MAR-2002; 2002US-0369224P.
XX
PA (CHIR) CHIRON CORP.
XX
XX Pichuanes S, Shyamala V;
PI WPI; 2003-201510/19.
XX
DR Detecting a human parvovirus B19 infection in a biological sample to
PT prevent viral transmission, comprises reacting a parvovirus B19 nucleic
PT acid with a primer complementary to the 3'-terminal portion of the RNA
PT target sequence.

CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 13 BP; 1 A; 0 C; 4 G; 7 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4206 GAACCAACATA 4218
 DB 13 RAACCAACATA 1

RESULT 281

ABH10370
 ID ABH10370 standard; DNA; 13 BP.

XX
 AC ABH10370;

XX
 DT 22-FEB-2002 (first entry)

XX
 DE Oligonucleotide SEQ ID NO 210347 for detecting SNP TSC0051369.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.

XX
 PN WO200177384-A2.

XX
 PD 18-OCT-2001.

XX
 PF 06-APR-2001; 2001WO-IB000713.

XX
 PR 07-APR-2000; 2000DE-01019173.

XX
 PA (EPIG-) EPIDENOMICS AG.

XX
 PI Olek A, Piepenbrock C, Berlin K;

XX
 DR WPI; 2001-657177/75.

XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX
 PS Claim 1; SEQ ID NO 210347; 29bp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 92 TTTTGAATTTT 104
 |||||

DB 1 TTTTGAATTTT 13

RESULT 282

ABH10370/C
 ID ABH10370 standard; DNA; 13 BP.

XX
 AC ABH10370;

XX
 DT 22-FEB-2002 (first entry)

XX
 DE Oligonucleotide SEQ ID NO 210347 for detecting SNP TSC0051369.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.

XX
 PN WO200177384-A2.

XX
 PD 18-OCT-2001.

XX
 PF 06-APR-2001; 2001WO-IB000713.

XX
 PR 07-APR-2000; 2000DE-01019173.

XX
 PA (EPIG-) EPIDENOMICS AG.

XX
 PI Olek A, Piepenbrock C, Berlin K;

XX
 DR WPI; 2001-657177/75.

XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX
 PS Claim 1; SEQ ID NO 210347; 29bp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4925 AAAATTCAAAA 4937
 :|||||

DB 13 RAATTTCAAAA 1

RESULT 283

ABH58952/C
 ID ABH58952 standard; DNA; 13 BP.

XX
 AC ABH58952;

XX
 DT 22-FEB-2002 (first entry)

XX
 DE Oligonucleotide SEQ ID NO 258929 for detecting SNP TSC0062929.

PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPiG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1, SEQ ID NO 197490; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;
 XX
 QY Query Match 0.3%; Score 12.6; DB 1; Length 13;
 XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 XX
 DB 4381 AATATTTTAAAA 4393
 XX :|||||
 XX 1 RATATTTTAAAA 13
 XX
 RESULT 279
 ABH00437
 ID ABH00437 standard; DNA; 13 BP.
 XX
 AC ABH00437;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 200414 for detecting SNP TSC0049317.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPiG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1, SEQ ID NO 200414; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 1 Other;
 XX
 QY Query Match 0.3%; Score 12.6; DB 1; Length 13;
 XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 XX
 DB 2136 ACATATTAACAC 2148
 XX :|||||
 XX 1 RCTATTAACAC 13
 XX
 RESULT 280
 ABH28094/C
 ID ABH28094 standard; DNA; 13 BP.
 XX
 AC ABH28094;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 228071 for detecting SNP TSC0055616.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPiG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1, SEQ ID NO 228071; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

Best local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 152 TATATTTTAAATTT 164

DB 1 TATATTTTAAATTT 13

RESULT 276

ABC81994 standard; DNA; 13 BP.

ABC81994;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 82011 for detecting SNP TSC0020736.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

PA (EPIC-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

DR WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

PS Claim 1; SEQ ID NO 82011; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 0 G; 7 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 155 ATTTTAATTTAAT 167

DB 1 ATTTTAATTTAAT 13

RESULT 277

ABF97492/C
ID ABF97492 standard; DNA; 13 BP.

ABF97492;

XX 22-FEB-2002 (first entry)

DT Oligonucleotide SEQ ID NO 197489 for detecting SNP TSC0007561.

DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

PA (EPIC-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

DR WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

PS Claim 1; SEQ ID NO 197489; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4381 AATATTTTAAAA 4393

DB 13 AATATTTTAAAA 1

RESULT 278

ABF97493
ID ABF97493 standard; DNA; 13 BP.

ABF97493;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 197490 for detecting SNP TSC0007561.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PR designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PS Claim 1; SEQ ID NO 71149; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 3 G; 3 T; 0 U; 1 Other;
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1025 AATGGAATTAGT 1037
DB 1 AATGGAATTAGT 13
XX
RESULT 274
ABC73638/c
ID ABC73638 standard; DNA; 13 BP.
XX
XX ABC73638;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 73655 for detecting SNP TSC0018971.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 73655; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 2 G; 4 T; 0 U; 1 Other;
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 762 AATTCCTTAAAT 774
DB 13 AATTCCTTAAAT 1
XX
RESULT 275
ABC27078
ID ABC27078 standard; DNA; 13 BP.
XX
XX ABC27078;
XX
XX 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 27095 for detecting SNP TSC0007379.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 27095; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 0 G; 8 T; 0 U; 1 Other;
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;

```

RESULT 271
ABF95352
ID ABF95352 standard; DNA; 13 BP.
XX
XX ABF95352;
AC
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 195349 for detecting SNP TSC0048065.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 195349; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 1 Other;
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1486 ATTTAGTGTGTC 1498
XX |||||
XX 1 ATTTAGTGTGTY 13
XX
XX
XX RESULT 272
XX ABF91346/c
XX ID ABF91346 standard; DNA; 13 BP.
XX
XX AC ABF91346;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 191343 for detecting SNP TSC0047085.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX

```

```

XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 191343; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 0 G; 9 T; 0 U; 1 Other;
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX 2875 AATATATATATAT 2887
XX :|||||
XX 13 RAATATATATATAT 1
XX
XX
XX RESULT 273
XX ABC71132
XX ID ABC71132 standard; DNA; 13 BP.
XX
XX AC ABC71132;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 71149 for detecting SNP TSC0018444.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX

```

PS Claim 1; SEQ ID NO 156839; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB12073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 4382 ATATTTTAAAAA 4394
 Db :|||||
 13 RTATTTTAAAAA 1
 RESULT 269
 ABC46938/c
 ID ABC46938 standard; DNA; 13 BP.
 AC ABC46938;
 XX
 DT 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 46955 for detecting SNP TSC0013517.
 XX
 KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 PD 18-OCT-2001.
 PF 06-APR-2001; 2001WO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 PS (EPIC-) EPIGENOMICS AG.
 PA
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 46955; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB12073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 0 C; 0 G; 10 T; 0 U; 1 Other;
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2874 AAAATTTAAAAA 2886
 Db :|||||
 13 RAAATTTAAAAA 1
 RESULT 270
 ABF29045/c
 ID ABF29045 standard; DNA; 13 BP.
 AC ABF29045;
 XX
 DT 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 129042 for detecting SNP TSC0032305.
 XX
 KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 PD 18-OCT-2001.
 PF 06-APR-2001; 2001WO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 PS (EPIC-) EPIGENOMICS AG.
 PA
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 129042; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB12073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 3298 TTTAAATTTGTT 3310
 Db :|||||
 13 TTTAAATTTGTT 1

DE Oligonucleotide SEQ ID NO 229500 for detecting SNP TSC0010567.
XX
XX SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIDENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
XX Claim 1; SEQ ID NO 229500; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
XX Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
SQ
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX
XX 3300 TAAATTGTTTTT 3312
DB 13 TAAATTGTTTTT 1
XX
XX
XX RESULT 267
ABF56842
ID ABF56842 standard; DNA; 13 BP.
XX
XX ABF56842;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 156839 for detecting SNP TSC0039545.
XX
XX SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX

XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIDENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
XX Claim 1; SEQ ID NO 156839; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
XX Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;
SQ
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX
XX 4385 TTTTAAATAATC 4397
DB 1 TTTTAAATAATV 13
XX
XX
XX RESULT 268
ABF56842/C
ID ABF56842 standard; DNA; 13 BP.
XX
XX ABF56842;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 156839 for detecting SNP TSC0039545.
XX
XX SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIDENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX

CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

CC Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4924 AAAAATTTCAAAA 4936
 DB 13 RAAATTTCAAAA 1

RESULT 264

ABC09225
 ID ABC09225 standard; DNA; 13 BP.

AC ABC09225;

DT 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 9216 for detecting SNP TSC0002449.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 9216; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 5 A; 3 C; 0 G; 4 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1767 AAACATACACATTT 1779
 DB 1 RAACTACACATTT 13

RESULT 265

ABC09802
 ID ABC09802 standard; DNA; 13 BP.

AC ABC09802;

DT 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 9793 for detecting SNP TSC0002547.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 9793; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 0 C; 6 G; 4 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2076 GTTAGTAGCGGTT 2088
 DB 1 GTTAGTAGCGGTT 13

RESULT 266

ABH29523/C
 ID ABH29523 standard; DNA; 13 BP.

AC ABH29523;

DT 22-FEB-2002 (first entry)

PN WO200177384-A2.
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPiG-) EPIGENOMICS AG.
 PA
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS
 XX Claim 1; SEQ ID NO 228072; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 7 A; 4 C; 0 G; 1 T; 0 U; 1 Other;
 XX
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 4206 GAACCCAAACATA 4218
 DB 1 RAACCCAAACATA 13
 RESULT 262
 ABC71133/c
 ID ABC71133 standard; DNA; 13 BP.
 AC ABC71133;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 71150 for detecting SNP TSC0018444.
 XX
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPiG-) EPIGENOMICS AG.
 PA
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS
 XX Claim 1; SEQ ID NO 71150; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 3 A; 3 C; 0 G; 6 T; 0 U; 1 Other;
 XX
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1025 AATGGAATTAGT 1037
 DB 13 AATGGAATTAGT 1
 RESULT 263
 ABC71204/c
 ID ABC71204 standard; DNA; 13 BP.
 AC ABC71204;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 71221 for detecting SNP TSC0018455.
 XX
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPiG-) EPIGENOMICS AG.
 PA
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS
 XX Claim 1; SEQ ID NO 71221; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The

Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4384 ATTTTAAAAATA 4396
:|||||
1 RTTTTAAAAATA 13

RESULT 259
ABC63769/c
ID ABC63769 standard; DNA; 13 BP.
XX
XX ABC63769;
AC
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 63786 for detecting SNP TSC0016840.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX MO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIC-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 63786; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB12073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4383 TATTTTAAAAAT 4395
:|||||
13 TATTTTAAAAAT 1

RESULT 260
ABH00436/c
ID ABH00436 standard; DNA; 13 BP.

XX
XX ABH00436;
AC
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 200413 for detecting SNP TSC0049317.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX MO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIC-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 200413; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB12073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2136 ACATATTAACAAC 2148
:|||||
13 RCTATTAACAAC 1

RESULT 261
ABH28095
ID ABH28095 standard; DNA; 13 BP.
XX
XX ABH28095;
AC
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 228072 for detecting SNP TSC0055616.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX

PA (EPIC-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX
 DR
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS
 CC Claim 1; SEQ ID NO 195350; 29pp + Sequence Listing; German.
 CC
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 6 A; 4 C; 0 G; 2 T; 0 U; 1 Other;
 XX
 XX
 QY
 Db 1486 ATTTAGTGTC 1498
 13 ATTTAGTGTC 1
 RESULT 257
 ID ABC46939 standard; DNA; 13 BP.
 AC ABC46939;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 46956 for detecting SNP TSC0013517.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIC-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 46956; 29pp + Sequence Listing; German.
 CC
 CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 10 A; 0 C; 0 G; 2 T; 0 U; 1 Other;
 XX
 XX
 QY
 Db 2874 AAAATATAAAAA 2886
 1 AAAATATAAAAA 13
 RESULT 258
 ID ABC63769 standard; DNA; 13 BP.
 AC ABC63769;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 63786 for detecting SNP TSC0016840.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIC-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 63786; 29pp + Sequence Listing; German.
 CC
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;

```
RESULT 254
ABC71205
ID ABC71205 standard; DNA; 13 BP.
XX
AC ABC71205;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 71222 for detecting SNP TSC0018455.
XX
KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI MPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
PS Claim 1; SEQ ID NO 71222; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
XX
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 4924 AAAAATTTCAAA 4936
:|||||
Db 1 RAAAAATTTCAAA 13
RESULT 255
ABC09803/c
ID ABC09803 standard; DNA; 13 BP.
XX
AC ABC09803;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 9794 for detecting SNP TSC0002547.
XX
KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
```

```
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI MPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
PS Claim 1; SEQ ID NO 9794; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 6 C; 0 G; 2 T; 0 U; 1 Other;
XX
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 2076 GTTAGTAGGGGTT 2088
|||||
Db 13 GTTAGTAGGGGTT 1
RESULT 256
ABP95353/c
ID ABP95353 standard; DNA; 13 BP.
XX
AC ABP95353;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 195350 for detecting SNP TSC0048065.
XX
KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
```


DT 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 259122 for detecting SNP TSC0062956.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 259122; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 1 C; 0 G; 6 T; 0 U; 1 Other;
SQ
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 736 TTTATGAAAT 748
DB |||||
13 TTTATGAAAT 1
RESULT 250
ID ABF09107 standard; DNA; 13 BP.
XX
XX ABF09107;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 109104 for detecting SNP TSC0027309.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX

XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 109104; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 4 C; 0 G; 1 T; 0 U; 1 Other;
SQ
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 3002 GAAATACCCCA 3014
DB :|||
1 RAAATACCCCA 13
RESULT 251
ID ABH18928 standard; DNA; 13 BP.
XX
XX ABH18928;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 218905 for detecting SNP TSC0053241.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT

CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
 SQ
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 OY 92 TTTTGAATTTT 104
 DB 13 TTTTGAATTTT 1
 RESULT 247
 ID ABF45891 standard; DNA; 13 BP.
 AC ABF45891;
 XX
 DT 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 145888 for detecting SNP TSC0036753.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX MO200177384-A2.
 PN 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001MO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIC-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS
 XX Claim 1; SEQ ID NO 145888; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 13 BP; 6 A; 4 C; 0 G; 2 T; 0 U; 1 Other;
 SQ
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 OY 92 TTTTGAATTTT 104
 DB 13 TTTTGAATTTT 1
 RESULT 247
 ID ABF45891 standard; DNA; 13 BP.
 AC ABF45891;
 XX
 DT 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 145888 for detecting SNP TSC0036753.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX MO200177384-A2.
 PN 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001MO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIC-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS
 XX Claim 1; SEQ ID NO 145888; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;
 SQ
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 OY 3300 TAAATTTGTTT 3312
 DB 1 TAAATTTGTTT 13
 RESULT 249
 ID ABH59145 standard; DNA; 13 BP.
 AC ABH59145;
 XX
 DT 22-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 229499 for detecting SNP TSC0010567.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX MO200177384-A2.
 PN 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001MO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIC-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS
 XX Claim 1; SEQ ID NO 229499; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;
 SQ
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 OY 3300 TAAATTTGTTT 3312
 DB 1 TAAATTTGTTT 13
 RESULT 249
 ID ABH59145 standard; DNA; 13 BP.
 AC ABH59145;
 XX

Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 OY 4080 GACAAACCTTA 4092
 DB 1 RACAAACCTTA 13
 RESULT 248
 ID ABH29522 standard; DNA; 13 BP.
 AC ABH29522;
 XX
 DT 22-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 229499 for detecting SNP TSC0010567.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX MO200177384-A2.
 PN 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001MO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIC-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS
 XX Claim 1; SEQ ID NO 229499; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;
 SQ
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 OY 3300 TAAATTTGTTT 3312
 DB 1 TAAATTTGTTT 13
 RESULT 249
 ID ABH59145 standard; DNA; 13 BP.
 AC ABH59145;
 XX

OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIC-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS Claim 1; SEQ ID NO 156840; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB12073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 SQ Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 4385 TTTTAAATAAC 4397
 DB 13 TTTTAAATAATAY 1
 RESULT 245
 ABH10371
 ID ABH10371 standard; DNA; 13 BP.
 AC ABH10371;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 210348 for detecting SNP TSC0051369.
 XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIC-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI

XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS Claim 1; SEQ ID NO 210348; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB12073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 SQ Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 4925 AAAATTCAAAA 4937
 DB 1 RAAATTCAAAA 13
 RESULT 246
 ABH10371/C
 ID ABH10371 standard; DNA; 13 BP.
 AC ABH10371;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 210348 for detecting SNP TSC0051369.
 XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIC-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS Claim 1; SEQ ID NO 210348; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

```
XX SQ Sequence 13 BP; 4 A; 0 C; 3 G; 5 T; 0 U; 1 Other;
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1767 AACCTACACATTT 1779
:|||||
DB 13 RAACCTACACATTT 1

RESULT 242
ABF74749
ID ABE74749 standard; DNA; 13 BP.
AC ABE74749;
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 174746 for detecting SNP TSC0043465.
DE
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
XX Claim 1; SEQ ID NO 174746; 23pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 1 C; 0 G; 4 T; 0 U; 1 Other;
SQ
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 4894 AAATAAATAATTC 4906
:|||||
DB 1 RAATAAATAATTC 13

RESULT 243
```

```
ABF56843
ID ABF56843 standard; DNA; 13 BP.
XX
XX AC ABF56843;
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 156840 for detecting SNP TSC0039545.
DE
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
XX Claim 1; SEQ ID NO 156840; 23pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;
SQ
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 4382 ATATTTTAAAAA 4394
:|||||
DB 1 RATTTTAAAAA 13

RESULT 244
ABF56843/C
ID ABF56843 standard; DNA; 13 BP.
XX
XX AC ABF56843;
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 156840 for detecting SNP TSC0039545.
DE
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

PR 07-APR-2000; 2000DE-01019173.
XX
CC (EPiG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 247148; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 0 G; 7 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 632 GTTATTATTATA 644
DB :|||||
1 RTTATTATTATA 13
XX
RESULT 240
ABC27845
ID ABC27845 standard; DNA; 13 BP.
XX
AC ABC27845;
XX
XX 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 27862 for detecting SNP TSC0007854.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 27862; 29pp + Sequence Listing; German.

XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 1 C; 0 G; 4 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 742 GAAATTACTTAA 754
DB :|||||
1 RAAATTACTTAA 13
XX
RESULT 241
ABC09224/C
ID ABC09224 standard; DNA; 13 BP.
XX
AC ABC09224;
XX
XX 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 9215 for detecting SNP TSC0002449.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 9215; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

```

Db      13 AAATTGTTTTT 1
RESULT 237
ABH17947
ID      ABH17947 standard; DNA; 13 BP.
AC      ABH17947;
XX
XX
XX      22-FEB-2002 (first entry)
DE      Oligonucleotide SEQ ID NO 217924 for detecting SNP TSC0005361.
XX
XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX      Homo sapiens.
XX      WO200177384-A2.
XX
XX      18-OCT-2001.
XX
XX      06-APR-2001; 2001WO-IB000713.
XX
XX      07-APR-2000; 2000DE-01019173.
XX
XX      (EPIC-) EPIDENOMICS AG.
XX
XX      Olek A, Piepenbrock C, Berlin K;
XX      WPI; 2001-657177/75.
XX
XX      Set of oligonucleotides, useful for diagnosis and cell typing, is
XX      designed to detect single-nucleotide polymorphisms and cytosine
XX      methylation status.
XX
XX      Claim 1; SEQ ID NO 217924; 29pp + Sequence Listing; German.
XX
XX      This invention describes novel oligonucleotide primers or peptide nucleic
XX      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX      and cytosine methylation status in chemically pretreated genomic DNA. The
XX      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX      range of diseases including immune system, gastrointestinal, respiratory,
XX      central nervous system, cardiovascular and metabolic disorders. The
XX      oligomers are also used for detecting cell type differentiation. ABC00010
XX      -ABC99989, ABF00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
XX      represent the oligomers described in the invention. NOTE: The sequence
XX      data for this patent did not form part of the printed specification, but
XX      was obtained in electronic format from WIPO at
XX      ftp.wipo.int/pub/published_pct_sequences

SQ      Sequence 13 BP; 9 A; 2 C; 0 G; 1 T; 0 U; 1 Other;
Query Match
Best Local Similarity 0.3%; Score 12.6; DB 1; Length 13;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1283 GTTAAAAAACAC 1295
DB      1 RTAAAAAACAC 13

RESULT 238
ABH18929/c
ID      ABH18929 standard; DNA; 13 BP.
AC      ABH18929;
XX
XX
XX      22-FEB-2002 (first entry)
DE      Oligonucleotide SEQ ID NO 218906 for detecting SNP TSC0053241.
XX

```

```

XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX      Homo sapiens.
XX      WO200177384-A2.
XX
XX      18-OCT-2001.
XX
XX      06-APR-2001; 2001WO-IB000713.
XX
XX      07-APR-2000; 2000DE-01019173.
XX
XX      (EPIC-) EPIDENOMICS AG.
XX
XX      Olek A, Piepenbrock C, Berlin K;
XX      WPI; 2001-657177/75.
XX
XX      Set of oligonucleotides, useful for diagnosis and cell typing, is
XX      designed to detect single-nucleotide polymorphisms and cytosine
XX      methylation status.
XX
XX      Claim 1; SEQ ID NO 218906; 29pp + Sequence Listing; German.
XX
XX      This invention describes novel oligonucleotide primers or peptide nucleic
XX      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX      and cytosine methylation status in chemically pretreated genomic DNA. The
XX      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX      range of diseases including immune system, gastrointestinal, respiratory,
XX      central nervous system, cardiovascular and metabolic disorders. The
XX      oligomers are also used for detecting cell type differentiation. ABC00010
XX      -ABC99989, ABF00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
XX      represent the oligomers described in the invention. NOTE: The sequence
XX      data for this patent did not form part of the printed specification, but
XX      was obtained in electronic format from WIPO at
XX      ftp.wipo.int/pub/published_pct_sequences

SQ      Sequence 13 BP; 8 A; 0 C; 0 G; 4 T; 0 U; 1 Other;
Query Match
Best Local Similarity 0.3%; Score 12.6; DB 1; Length 13;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      151 TTATATTTTAAAT 163
DB      13 TTATATTTTAAAT 1

RESULT 239
ABH47171
ID      ABH47171 standard; DNA; 13 BP.
AC      ABH47171;
XX
XX
XX      22-FEB-2002 (first entry)
DE      Oligonucleotide SEQ ID NO 247148 for detecting SNP TSC0060388.
XX
XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX      Homo sapiens.
XX      WO200177384-A2.
XX
XX      18-OCT-2001.
XX
XX      06-APR-2001; 2001WO-IB000713.
XX

```

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PS Claim 1; SEQ ID NO 4093; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 0 G; 10 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2872 AAAAATATATAA 2884
DB :|||||
13 RAAAAATATAAA 1
XX
RESULT 235
ABH58431
ID ABH58431 standard; DNA; 13 BP.
XX
AC ABH58431;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 258408 for detecting SNP TSC0062835.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPig-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PT Claim 1; SEQ ID NO 258408; 29pp + Sequence Listing; German.
XX
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 0 G; 10 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3301 AAATTGTTTTC 3313

CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1325 GAAACCAATTT 1337
DB :|||||
1 RAAACCAATTT 13
XX
RESULT 236
ABH58431/C
ID ABH58431 standard; DNA; 13 BP.
XX
AC ABH58431;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 258408 for detecting SNP TSC0062835.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPig-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PT Claim 1; SEQ ID NO 258408; 29pp + Sequence Listing; German.
XX
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3301 AAATTGTTTTC 3313

AC ABC00871;
XX
XX 20-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 862 for detecting SNP TSC0000294.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 862; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and AB100010-AB102073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 10 A; 0 C; 0 G; 2 T; 0 U; 1 Other;
SQ
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 2873 AAAAATATATAAAA 2885
DB 1 RAAAAATATATAAAA 13
XX
XX RESULT 233
XX ABH62307/C
XX ID ABH62307 standard; DNA; 13 BP.
XX AC ABH62307;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 262284 for detecting SNP TSC00063624.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX

XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 262284; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and AB100010-AB102073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 2 C; 0 G; 6 T; 0 U; 1 Other;
SQ
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 708 AGGAAATATATTTT 720
DB 13 AGGAAATATATTTT 1
XX
XX RESULT 234
XX ABC04102/C
XX ID ABC04102 standard; DNA; 13 BP.
XX AC ABC04102;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 4093 for detecting SNP TSC00001538.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX

CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 10 A; 0 C; 0 G; 2 T; 0 U; 1 Other;

QY Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 2872 AAAAAATATATAA 2884
1 RAAAAATATATAA 13
:|||||

RESULT 230
ABH59144
ID ABH59144 standard; DNA; 13 BP.
XX
XX ABH59144;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 259121 for detecting SNP TSC0062956.
XX
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX
XX Claim 1; SEQ ID NO 259121; 29pp + Sequence Listing; German.

XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 6 A; 0 C; 1 G; 5 T; 0 U; 1 Other;

QY Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 736 TTTATGAAAAAT 748
1 TTTATGAAAAAT 13
:|||||

RESULT 231
ABC73639
ID ABC73639 standard; DNA; 13 BP.
XX
XX ABC73639;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 73656 for detecting SNP TSC0018971.
XX
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX
XX Claim 1; SEQ ID NO 73656; 29pp + Sequence Listing; German.

XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 4 A; 2 C; 0 G; 6 T; 0 U; 1 Other;

QY Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 762 AATTCCTTAAT 774
1 AATTCCTTAAT 13
:|||||

RESULT 232
ABC00871
ID ABC00871 standard; DNA; 13 BP.

XX	central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS	Homo sapiens.
XX	
FN	WO200177384-A2.
PD	18-OCT-2001.
XX	
FF	06-APR-2001; 2001WO-IB000713.
XX	
PR	07-APR-2000; 2000DE-01019173.
XX	
PA	(EPiG-) EPIGENOMICS AG.
XX	
PI	Olek A, Piepenbrock C, Berlin K;
XX	
DR	WPI; 2001-657177/75.
XX	
PT	Set of oligonucleotides, useful for diagnosis and cell typing, is
PT	designed to detect single-nucleotide polymorphisms and cytosine
PT	methylation status.
XX	
PS	Claim 1; SEQ ID NO 259140; 29pp + Sequence Listing; German.
XX	
CC	This invention describes novel oligonucleotide primers or peptide nucleic
CC	acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC	and cytosine methylation status in chemically pretreated genomic DNA. The
CC	oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC	range of diseases including immune system, gastrointestinal, respiratory,
CC	central nervous system, cardiovascular and metabolic disorders. The
CC	oligomers are also used for detecting cell type differentiation. ABC00010
CC	-AB099989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB102073
CC	represent the oligomers described in the invention. NOTE: The sequence
CC	data for this patent did not form part of the printed specification, but
CC	was obtained in electronic format from Wipo at
CC	ftp.wipo.int/pub/published_pct_sequences
XX	
SQ	Sequence 13 BP; 6 A; 1 C; 0 G; 5 T; 0 U; 1 Other;
XX	
Query Match	0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity	92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0	
OY	3759 ATTTTATGAAT 3771
DB	13 ATTTTATGAAY 1
XX	
RESULT 228	
ABC27844/C	
ID	ABC27844 standard; DNA; 13 BP.
XX	
AC	ABC27844;
XX	
DT	20-FEB-2002 (first entry)
XX	
DE	Oligonucleotide SEQ ID NO 27861 for detecting SNP TSC0007854.
XX	
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;	
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;	
central nervous system; gastrointestinal; respiratory; immune; metabolic.	
Homo sapiens.	
WO200177384-A2.	
18-OCT-2001.	
06-APR-2001; 2001WO-IB000713.	
07-APR-2000; 2000DE-01019173.	
(EPiG-) EPIGENOMICS AG.	
Olek A, Piepenbrock C, Berlin K;	
WPI; 2001-657177/75.	
Set of oligonucleotides, useful for diagnosis and cell typing, is	
designed to detect single-nucleotide polymorphisms and cytosine	
methylation status.	
Claim 1; SEQ ID NO 259140; 29pp + Sequence Listing; German.	
This invention describes novel oligonucleotide primers or peptide nucleic	
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)	
and cytosine methylation status in chemically pretreated genomic DNA. The	
oligonucleotides are used for diagnosis and/or prognosis of cancer and a	
range of diseases including immune system, gastrointestinal, respiratory,	
central nervous system, cardiovascular and metabolic disorders. The	
oligomers are also used for detecting cell type differentiation. ABC00010	
-AB099989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB102073	
represent the oligomers described in the invention. NOTE: The sequence	
data for this patent did not form part of the printed specification, but	
was obtained in electronic format from Wipo at	
ftp.wipo.int/pub/published_pct_sequences	
Sequence 13 BP; 6 A; 1 C; 0 G; 5 T; 0 U; 1 Other;	
Query Match	0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity	92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0	
OY	3759 ATTTTATGAAT 3771
DB	13 ATTTTATGAAY 1
RESULT 228	
ABC27844/C	
ID	ABC27844 standard; DNA; 13 BP.
AC	ABC27844;
DT	20-FEB-2002 (first entry)
DE	Oligonucleotide SEQ ID NO 27861 for detecting SNP TSC0007854.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;	
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;	
central nervous system; gastrointestinal; respiratory; immune; metabolic.	
Homo sapiens.	
WO200177384-A2.	
18-OCT-2001.	
06-APR-2001; 2001WO-IB000713.	
07-APR-2000; 2000DE-01019173.	
(EPiG-) EPIGENOMICS AG.	
Olek A, Piepenbrock C, Berlin K;	
WPI; 2001-657177/75.	
Set of oligonucleotides, useful for diagnosis and cell typing, is	
designed to detect single-nucleotide polymorphisms and cytosine	
methylation status.	
Claim 1; SEQ ID NO 259140; 29pp + Sequence Listing; German.	
This invention describes novel oligonucleotide primers or peptide nucleic	
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)	
and cytosine methylation status in chemically pretreated genomic DNA. The	
oligonucleotides are used for diagnosis and/or prognosis of cancer and a	
range of diseases including immune system, gastrointestinal, respiratory,	
central nervous system, cardiovascular and metabolic disorders. The	
oligomers are also used for detecting cell type differentiation. ABC00010	
-AB099989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB102073	
represent the oligomers described in the invention. NOTE: The sequence	
data for this patent did not form part of the printed specification, but	
was obtained in electronic format from Wipo at	
ftp.wipo.int/pub/published_pct_sequences	
Sequence 13 BP; 6 A; 1 C; 0 G; 5 T; 0 U; 1 Other;	
Query Match	0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity	92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0	
OY	3759 ATTTTATGAAT 3771
DB	13 ATTTTATGAAY 1
RESULT 228	
ABC27844/C	
ID	ABC27844 standard; DNA; 13 BP.
AC	ABC27844;
DT	20-FEB-2002 (first entry)
DE	Oligonucleotide SEQ ID NO 27861 for detecting SNP TSC0007854.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;	
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;	
central nervous system; gastrointestinal; respiratory; immune; metabolic.	
Homo sapiens.	
WO200177384-A2.	
18-OCT-2001.	
06-APR-2001; 2001WO-IB000713.	
07-APR-2000; 2000DE-01019173.	
(EPiG-) EPIGENOMICS AG.	
Olek A, Piepenbrock C, Berlin K;	
WPI; 2001-657177/75.	
Set of oligonucleotides, useful for diagnosis and cell typing, is	
designed to detect single-n	

```

XX  Olek A, Piepenbrock C, Berlin K;
XX
XX
XX  WPI; 2001-657177/75.
XX
XX  Set of oligonucleotides, useful for diagnosis and cell typing, is
XX  designed to detect single-nucleotide polymorphisms and cytosine
XX  methylation status.
XX
XX  Claim 1; SEQ ID NO 27861; 29pp + Sequence Listing; German.
XX
XX  This invention describes novel oligonucleotide primers or peptide nucleic
XX  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX  and cytosine methylation status in chemically pretreated genomic DNA. The
XX  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX  range of diseases including immune system, gastrointestinal, respiratory,
XX  central nervous system, cardiovascular and metabolic disorders. The
XX  oligomers are also used for detecting cell type differentiation. ABC00010
XX  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
XX  represent the oligomers described in the invention. NOTE: The sequence
XX  data for this patent did not form part of the printed specification, but
XX  was obtained in electronic format from WIPO at
XX  ftp.wipo.int/pub/published_pct_sequences
XX
XX  Sequence 13 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 1 Other;
XX
XX  Query Match          0.3%; Score 12.6; DB 1; Length 13;
XX  Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX  Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX  742 GAAATTACTTAA 754
XX  :|||||
XX  13 RAAATTACTTAA 1
XX
XX  RESULT 229
XX  ABC04103
XX  ID ABC04103 standard; DNA; 13 BP.
XX  AC
XX  ABC04103;
XX  DT 20-FEB-2002 (first entry)
XX
XX  Oligonucleotide SEQ ID NO 4094 for detecting SNP TSC0001538.
XX  DE
XX  KM SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX  KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX  XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX  OS Homo sapiens.
XX  PN WO20017384-A2.
XX  PD 18-OCT-2001.
XX  PF 06-APR-2001; 2001WO-IB000713.
XX  PR 07-APR-2000; 2000DE-01019173.
XX  XX
XX  (EPIG-) EPIGENOMICS AG.
XX  PA
XX  Olek A, Piepenbrock C, Berlin K;
XX  PI
XX  WPI; 2001-657177/75.
XX  DR
XX  Set of oligonucleotides, useful for diagnosis and cell typing, is
XX  designed to detect single-nucleotide polymorphisms and cytosine
XX  methylation status.
XX
XX  Claim 1; SEQ ID NO 4094; 29pp + Sequence Listing; German.
XX
XX  This invention describes novel oligonucleotide primers or peptide nucleic
XX  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX

```


CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 1 A; 0 C; 4 G; 7 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;

Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 3002 GAAAAATACCCCA 3014

DB 13 RAAAAATACCCCA 1

RESULT 225

ABF29044 ID ABF29044 standard; DNA; 13 BP.

AC ABF29044;

XX 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 129041 for detecting SNP TSC0032305.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX Claim 1; SEQ ID NO 129041; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073

CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences

RESULT 226
ABH47999/C
ID ABH47999 standard; DNA; 13 BP.

XX ABH47999;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 247976 for detecting SNP TSC0060610.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX Claim 1; SEQ ID NO 247976; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073

CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 7 A; 1 C; 0 G; 4 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;

Best Local Similarity 92.3%; Pred. No. 1.4e+02;

Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 144 TTTAATGTTATAT 156

DB 13 TTTAATGTTATAT 1

RESULT 227

ABH59163/C

ID ABH59163 standard; DNA; 13 BP.

XX ABH59163;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 259140 for detecting SNP TSC0062961.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PS
PS Claim 1; SEQ ID NO 27096; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
CC
XX
SQ Sequence 13 BP; 8 A; 0 C; 0 G; 4 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 152 TATATTTTAAATTT 164
Db 13 TATATTTTAAATTT 1
XX
RESULT 223
ABC81995/c
ID ABC81995 standard; DNA; 13 BP.
XX
AC ABC81995;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 82012 for detecting SNP TSC0020736.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX
PS Claim 1; SEQ ID NO 82012; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
CC
XX
SQ Sequence 13 BP; 7 A; 0 C; 0 G; 5 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 155 ATTTTAATTTAAT 167
Db 13 ATTTTAATTTAAT 1
XX
RESULT 224
ABF09106/c
ID ABF09106 standard; DNA; 13 BP.
XX
AC ABF09106;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 109103 for detecting SNP TSC0027309.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PS
PS Claim 1; SEQ ID NO 109103; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but

```
OY 144 TTTAATGTATAT 156
DB 1 TTTAATGTATAT 13
RESULT 220
ABH58430
ID ABH58430 standard; DNA; 13 BP.
AC ABH58430;
XX
XX
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 258407 for detecting SNP TSC0062835.
XX
XX SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 258407; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 3301 AAATTGTTTTC 3313
DB 1 AAATTGTTTTC 13
RESULT 221
ABH58430/c
ID ABH58430 standard; DNA; 13 BP.
AC ABH58430;
XX
XX
XX 22-FEB-2002 (first entry)
```

```
XX
XX Oligonucleotide SEQ ID NO 258407 for detecting SNP TSC0062835.
XX
XX SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 258407; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1325 GAAAAACAATTT 1337
DB 13 RAAAAACAATTT 1
RESULT 222
ABC27079/c
ID ABC27079 standard; DNA; 13 BP.
AC ABC27079;
XX
XX 20-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 27096 for detecting SNP TSC0007379.
XX
XX SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
```

DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 63785; 29pp + Sequence listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4384 ATTTTAAAAATA 4396
:|||||
13 RTTTTAAAAATA 1
DB
RESULT 218
ABF45890/c
ID ABF45890 standard; DNA; 13 BP.
XX
AC ABF45890;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 145887 for detecting SNP TSC0036753.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 145887; 29pp + Sequence listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4080 GACCAACCACTTA 4092
:|||||
13 RACCAACCACTTA 1
DB
RESULT 219
ABH47998
ID ABH47998 standard; DNA; 13 BP.
XX
AC ABH47998;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 247975 for detecting SNP TSC0060610.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 247975; 29pp + Sequence listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

ID ABC00870 standard; DNA; 13 BP.
XX
XX ABC00870;
AC
XX 20-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 861 for detecting SNP TSC0000294.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 861; 29pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB102073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 0 G; 10 T; 0 U; 1 Other;
SQ
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX 2873 AAAAATATATAA 2885
XX :|||||
XX 13 RAAATATATAA 1
XX
XX RESULT 216
XX ABC63768
XX ABC63768 standard; DNA; 13 BP.
XX
XX ABC63768;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 63785 for detecting SNP TSC0016840.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX
```

```

XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 63785; 29pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB102073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 0 C; 0 G; 6 T; 0 U; 1 Other;
SQ
XX
XX Query Match 0.3%; Score 12.6; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 1.4e+02;
XX Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX 4383 TATTTTAAAT 4395
XX :|||||
XX 1 TATTTTAAAY 13
XX
XX RESULT 217
XX ABC63768/c
XX ABC63768 standard; DNA; 13 BP.
XX
XX ABC63768;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 63785 for detecting SNP TSC0016840.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX
```

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

CC CC
XX XX
SQ Sequence 13 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4894 AATATTAATTAATTC 4906
13 AAATTAATTAATTC 1

Db 13 AAATTAATTAATTC 1

RESULT 213
ABF91347
ID ABF91347 standard; DNA; 13 BP.
XX
XX ABF91347;
AC
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 191344 for detecting SNP TSC0047085.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 191344; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 9 A; 0 C; 0 G; 3 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2875 AATATTAATTAAT 2887
1 AAATTAATTAAT 13

Db 1 AAATTAATTAAT 13

RESULT 214
ABH62306
ID ABH62306 standard; DNA; 13 BP.
XX
XX ABH62306;
AC
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 262283 for detecting SNP TSC0063624.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 262283; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

CC CC
XX XX
SQ Sequence 13 BP; 6 A; 0 C; 2 G; 4 T; 0 U; 1 Other;

Query Match 0.3%; Score 12.6; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 1.4e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 708 AGAATAATATTTT 720
1 AGAATAATATTTT 13

Db 1 AGAATAATATTTT 13

RESULT 215
ABC00870/c

KW Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
 KM smooth muscle cell; hyperproliferation; restenosis; cancer; c-myc;
 KM coronary angioplasty, ss.
 XX Homo sapiens.
 OS
 XX
 XX WO9531541-A2.
 XX
 XX
 PD 23-NOV-1995.
 XX
 XX
 PF 18-MAY-1995; 95WO-US006368.
 XX
 XX
 PR 18-MAY-1994; 94US-00245466.
 PR 13-JAN-1995; 95US-00373124.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Stinchcomb DT, Draper K, Mcswigen J, Jarvis T;
 DR WPI; 1996-010927/01.
 XX
 XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myc,
 PT for treating restenosis or cancer.
 XX
 PS Claim 1; Page 75; 128pp; English.
 XX
 CC The present sequence represents the preferred target sequence for an
 CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
 CC the human c-myc sequence at the base position indicated in the descriptor
 CC line. The c-myc sequence was screened for optimal ribozyme target sites
 CC using a computer folding algorithm, and regions of the mRNA which did not
 CC form secondary folding structures and contained potential ribozyme
 CC cleavage sites were identified. Ribozymes were synthesised and their
 CC activities optimised by either varying the length of the binding arms or
 CC by modification to prevent degradation by nucleases. The ribozymes cleave
 CC the c-myc sequence and can be used to prevent smooth muscle cell
 CC hyperproliferation in restenosis, especially after coronary angioplasty,
 CC and in cancers
 CC
 SQ Sequence 17 BP; 8 A; 1 C; 0 G; 0 T; 8 U; 0 Other;
 XX
 XX
 Query Match 0.3%; Score 13; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 2.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4384 ATTTTAAATA 4396
 DB 17 ATTTTAAATA 5
 XX
 XX
 RESULT 211
 ABH17946/C
 ID ABH17946 standard; DNA; 13 BP.
 XX
 AC ABH17946;
 XX
 XX 22-FEB-2002 (first entry)
 DT
 XX
 XX Oligonucleotide SEQ ID NO 217923 for detecting SNP TSC0005381.
 DE
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO200177384-A2.
 XX
 XX
 PD 18-OCT-2001.
 XX
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 XX

XX
 PA (EPIC-) EPIGENOMICS AG.
 XX
 XX
 PT Olek A, Piepenbrock C, Berlin K;
 DR WPI; 2001-657177/75.
 XX
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX
 PS Claim 1; SEQ ID NO 217923; 29pp + Sequence Listing; German.
 XX
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABT00010-ABT82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 1 A; 0 C; 2 G; 9 T; 0 U; 1 Other;
 XX
 XX
 Query Match 0.3%; Score 12.6; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 1.4e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1283 GTAAAAAACAAC 1295
 DB 13 RTAAAAAACAAC 1
 XX
 XX
 RESULT 212
 ABF74748/C
 ID ABF74748 standard; DNA; 13 BP.
 XX
 AC ABF74748;
 XX
 XX 22-FEB-2002 (first entry)
 DT
 XX
 XX Oligonucleotide SEQ ID NO 174745 for detecting SNP TSC0043465.
 DE
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO200177384-A2.
 XX
 XX
 PD 18-OCT-2001.
 XX
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX
 PA (EPIC-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 PT WPI; 2001-657177/75.
 DR
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX
 PS Claim 1; SEQ ID NO 174745; 29pp + Sequence Listing; German.
 XX

Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 2327 TTGTAGATTATGA 2339
DB 1 TTGTAGATTATGA 13

RESULT 208
ABH55809/c
ID ABH55809 standard; DNA; 13 BP.
XX
XX
XX ABH55809;
AC
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 255786 for detecting SNP TSC0062332.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX MO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIC-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX

Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX

Claim 1; SEQ ID NO 255786; 29bp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX

Sequence 13 BP; 9 A; 0 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 151 TTATATTTTAAAT 163
DB 13 TTATATTTTAAAT 1

RESULT 209
AAV48500/c
ID AAV48500 standard; DNA; 14 BP.
XX
XX AAV48500;
AC

XX
DT 15-OCT-1998 (first entry)
XX
XX p53 gene antisense oligonucleotide p53-16.
DE
XX
XX p53; antisense oligonucleotide; modulate; gene expression; ss.
XX
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX EP856579-A1.
PN
XX
XX 05-AUG-1998.
PD
XX
XX
XX 31-JAN-1997; 97EP-00101531.
PR
XX
XX 31-JAN-1997; 97EP-00101531.
PR
XX
XX 31-JAN-1997; 97EP-00101531.
PR
XX
XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
PA
XX
XX Schlingensiepen K, Brysch W;
PI
XX
XX WPI; 1998-400910/35.
DR
XX
XX

Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT consecutive guanosine or inosine - and have specific ratio of residues
PT able to form two or three hydrogen bonds, have greater activity and
PT reduced toxicity, used therapeutically or to modulate growth of cells in
PT culture.
XX
XX

Claim 10; Fig 4a; 286pp; English.

AAV48485-564 represent antisense oligonucleotides directed against the
CC p53 gene. Of these, only oligonucleotides AAV48485-517 resulted in
CC effective downregulation of negative growth by p53 and increased cell
CC proliferation, while AAV48518-64 had little effect. The oligonucleotides
CC exemplify the invention. The specification describes oligonucleotides
CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that
CC can each form three hydrogen bonds to cytosine; do not contain four
CC consecutive nucleotides able to form three H-bonds each to four
CC consecutive cytosines; do not contain two sequences of three consecutive
CC nucleotides each able to form three H-bonds to three consecutive
CC cytosines, and the ratio between residues able to form two H-bonds each
CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
CC oligonucleotides are used to modulate expression of genes, particularly
CC the genes for p53, E2F-2, JunB, JunD, TGF-beta 1 or beta 2 to control
CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or
CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC oligonucleotides can also be used to analyse function of proteins (by
CC altering their expression or activity) and therapeutically, e.g. in cases
CC of cancer or (targeting TGF) for stimulating the immune system
XX
XX

Sequence 14 BP; 1 A; 1 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3730 CCCAGAAAACCTA 3742
DB 14 CCCAGAAAACCTA 2

RESULT 210
AAT81447/c
ID AAT81447 standard; RNA; 17 BP.
XX
XX AAT81447;
AC
XX
XX 07-DEC-1997 (first entry)
DT
XX
XX Human c-myc hammerhead ribozyme target sequence (nt. position 2526).
DE
XX

PI Olek A, Piepenbrock C, Berlin K;
XX
XX MPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
PS Claim 1; SEQ ID NO 227647; 29pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;
XX
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 4876 TCGAAAAATATATA 4888
DB 1 TCGAAAAATATATA 13
XX
RESULT 206
ABF83173
ID ABF83173 standard; DNA; 13 BP.
XX
XX ABF83173;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 183170 for detecting SNP TSC0045230.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX MO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX MPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
PS Claim 1; SEQ ID NO 183170; 29pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 13 BP; 5 A; 0 C; 0 G; 8 T; 0 U; 0 Other;
XX
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 153 ATATTTTAAATTTA 165
DB 1 ATATTTTAAATTTA 13
XX
RESULT 207
ABH40444
ID ABH40444 standard; DNA; 13 BP.
XX
XX ABH40444;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 240421 for detecting SNP TSC0058645.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX MO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX MPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
PS Claim 1; SEQ ID NO 240421; 29pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX
Query Match 0.3%; Score 13; DB 1; Length 13;

```

RESULT 203
ABC51622
ID ABC51622 standard; DNA; 13 BP.
XX
XX
AC ABC51622;
XX
XX
DT 21-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 51639 for detecting SNP TSC0014402.
XX
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX
OS Homo sapiens.
XX
XX
PN WO200177384-A2.
XX
XX
PD 18-OCT-2001.
XX
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX
PS (EPIG-) EPIGENOMICS AG.
XX
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX
DR WPI; 2001-657177/75.
XX
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
PS Claim 1; SEQ ID NO 51639; 29pp + Sequence Listing; German.
XX
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;
XX
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX
QY 159 TAAATTAATTGA 171
DB 1 TAAATTAATTGA 13
XX
XX
RESULT 204
ABC61704
ID ABC61704 standard; DNA; 13 BP.
XX
XX
AC ABC61704;
XX
XX
DT 21-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 61721 for detecting SNP TSC0016411.
XX
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX

```

```

XX
XX
OS Homo sapiens.
XX
XX
PN WO200177384-A2.
XX
XX
PD 18-OCT-2001.
XX
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX
PS (EPIG-) EPIGENOMICS AG.
XX
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX
DR WPI; 2001-657177/75.
XX
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
PS Claim 1; SEQ ID NO 61721; 29pp + Sequence Listing; German.
XX
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989, and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 13 BP; 11 A; 0 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX
QY 2873 AAAAATATAAAA 2885
DB 1 AAAAATATAAAA 13
XX
XX
RESULT 205
ABH27670
ID ABH27670 standard; DNA; 13 BP.
XX
XX
AC ABH27670;
XX
XX
DT 22-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 227647 for detecting SNP TSC0055515.
XX
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX
OS Homo sapiens.
XX
XX
PN WO200177384-A2.
XX
XX
PD 18-OCT-2001.
XX
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX
PS (EPIG-) EPIGENOMICS AG.
XX
XX

```

PS Claim 1; SEQ ID NO 205829; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4415 ATTGAGGTATT 4427
DB 1 ATTGAGGTATT 13
|||||
|
RESULT 201
ABF00054/C
ID ABF00054 standard; DNA; 13 BP.
XX
AC ABF00054;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 190051 for detecting SNP TSC0009718.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 190051; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4379 CAATATTTTTAA 4391
DB 13 CAATATTTTTAA 1
|||||
|
RESULT 202
ABC01021
ID ABC01021 standard; DNA; 13 BP.
XX
AC ABC01021;
XX
XX 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 1012 for detecting SNP TSC0000334.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 1012; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI2073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 11 A; 0 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2872 AAAAAATATTTAAA 2884
DB 1 AAAAAATATTTAAA 13
|||||
|

DE Oligonucleotide SEQ ID NO 99995 for detecting SNP TSC0024859.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
XX Claim 1; SEQ ID NO 99995; 29pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 0 A; 1 C; 10 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4717 CCCACGCCGCCACC 4729
XX
XX 13 CCCACGCCGCCACC 1
XX
XX
XX RESULT 199
XX ABH18736/C
XX ID ABH18736 standard; DNA; 13 BP.
XX
XX ABH18736;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 218713 for detecting SNP TSC0053197.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX

XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
XX Claim 1; SEQ ID NO 218713; 29pp + Sequence listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4324 TTTTAAACTCAA 4336
XX
XX 13 TTTTAAACTCAA 1
XX
XX
XX RESULT 200
XX ABH05852
XX ID ABH05852 standard; DNA; 13 BP.
XX
XX ABH05852;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 205829 for detecting SNP TSC0050445.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX

CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABI00010-ABI02073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SO Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4300 TAAATCCCTAAC 4312
 DB 13 TAAATCCCTAAC 1

RESULT 196
 ABF90055
 ID ABF90055 standard; DNA; 13 BP.
 AC ABF90055;
 XX
 XX
 DT 22-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 190052 for detecting SNP TSC0009718.
 DE
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO200177384-A2.
 PN
 XX
 PD 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001MO-IB000713.
 PF
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX
 XX (EPIC-) EPIGENOMICS AG.
 PA
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX
 XX WPI; 2001-657177/75.
 DR
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT
 XX
 XX Claim 1; SEQ ID NO 190052; 29pp + Sequence Listing; German.
 PS
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABI00010-ABI02073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX
 XX Sequence 13 BP; 6 A; 1 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4379 CAAATATTTTAA 4391
 DB 1 CAAATATTTTAA 13

RESULT 197
 ABH43912
 ID ABH43912 standard; DNA; 13 BP.
 AC ABH43912;
 XX
 XX
 DT 22-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 243889 for detecting SNP TSC0059498.
 DE
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO200177384-A2.
 PN
 XX
 PD 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001MO-IB000713.
 PF
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX
 XX (EPIC-) EPIGENOMICS AG.
 PA
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX
 XX WPI; 2001-657177/75.
 DR
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT
 XX
 XX Claim 1; SEQ ID NO 243889; 29pp + Sequence Listing; German.
 PS
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABI00010-ABI02073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX
 XX Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 149 TGTATATTTTAA 161
 DB 1 TGTATATTTTAA 13

RESULT 198
 ABC9978/c
 ID ABC9978 standard; DNA; 13 BP.
 AC ABC9978;
 XX
 XX
 DT 21-FEB-2002 (first entry)
 XX

XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPiG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 219978; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 3646 TTTTATGCTTTA 3658
XX 13 TTTTATGCTTTA 1
XX
XX RESULT 194
XX ABF96462
XX ID ABF96462 standard; DNA; 13 BP.
XX AC ABF96462;
XX XX
XX DT 22-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 196459 for detecting SNP TSC0008585.
XX XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX PN 18-OCT-2001.
XX PD 06-APR-2001; 2001WO-IB000713.
XX PF 07-APR-2000; 2000DE-01019173.
XX PR (EPiG-) EPIGENOMICS AG.
XX PA Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 196459; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 144 TTTATGCTTATAT 156
XX 1 TTTATGCTTATAT 13
XX
XX RESULT 195
XX ABF54068/C
XX ID ABF54068 standard; DNA; 13 BP.
XX AC ABF54068;
XX XX
XX DT 21-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 154065 for detecting SNP TSC0000578.
XX XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX PN 18-OCT-2001.
XX PD 06-APR-2001; 2001WO-IB000713.
XX PF 07-APR-2000; 2000DE-01019173.
XX PR (EPiG-) EPIGENOMICS AG.
XX PA Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 154065; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The

PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 163754; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX ftp.wipo.int/pub/published_pct_sequences

Seq Sequence 13 BP; 3 A; 1 C; 0 G; 9 T; 0 U; 0 Other;
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1186 ATTAAAGAAATA 1198
Db 13 ATTAAAGAAATA 1

RESULT 189
ABC93208
ID ABC93208 standard; DNA; 13 BP.
XX
XX ABC93208;
XX
XX 21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 93225 for detecting SNP TSC0023296.
XX
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 93225; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC ftp.wipo.int/pub/published_pct_sequences

Seq Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3647 TTTTATGTGTAG 3659
Db 1 TTTTATGTGTAG 13

RESULT 190
ABC44831/C
ID ABC44831 standard; DNA; 13 BP.
XX
XX ABC44831;
XX
XX 21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 44848 for detecting SNP TSC0013119.
XX
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 44848; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX ftp.wipo.int/pub/published_pct_sequences

Seq Sequence 13 BP; 5 A; 2 C; 0 G; 6 T; 0 U; 0 Other;


```
RESULT 186
ABF35253
ID ABF35253 standard; DNA; 13 BP.
XX
XX ABF35253;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 135250 for detecting SNP TSC0033736.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX MPI; 2001-657177/75.
PT
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 135250; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4389 TAAAAATACCTACC 4401
DB 1 TAAAAATACCTACC 13
AC
XX
XX ABF39197 standard; DNA; 13 BP.
ID ABF39197;
AC
XX
XX ABF39197;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 139194 for detecting SNP TSC0034867.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX
```

```
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX MPI; 2001-657177/75.
PT
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 139194; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3487 TAAATACCATAT 3499
DB 1 TAAATACCATAT 13
AC
XX
XX ABF63757;
ID ABF63757 standard; DNA; 13 BP.
ID ABF63757;
AC
XX
XX ABF63757;
AC
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 163754 for detecting SNP TSC0041141.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
```

PT methylation status.
XX
PS Claim 1; SEQ ID NO 75869; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABH00010-ABH99989, ABH00010-ABH99989 and ABH00010-ABH82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
CC
SQ Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 632 GTTATTTAATTA 644
Db 1 GTTATTTAATTA 13

RESULT 184
ABC55712/c
ID ABC55712 standard; DNA; 13 BP.
XX
AC ABC55712;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 55729 for detecting SNP TSC0015185.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO2001.77384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PS (EPIC-) EPIDENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 55729; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABH00010-ABH99989, ABH00010-ABH99989 and ABH00010-ABH82073
CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
CC
SQ Sequence 13 BP; 6 A; 0 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 306 TACTACTTTAA 318
Db 13 TACTACTTTAA 1

RESULT 185
ABC15876/c
ID ABC15876 standard; DNA; 13 BP.
XX
AC ABC15876;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 15883 for detecting SNP TSC0003503.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO2001.77384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PS (EPIC-) EPIDENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 15883; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABH00010-ABH99989, ABH00010-ABH99989 and ABH00010-ABH82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
CC
SQ Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4923 TAAATTTTCAA 4935
Db 13 TAAATTTTCAA 1

DT 22-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 174973 for detecting SNP TSC0043498.
 DE
 XX
 XX SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 CC
 CC Claim 1, SEQ ID NO 174973; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3310 TTTTCACCATTA 3322
 DB 13 TTTTCACCATTA 1
 RESULT 182
 ABF76959
 ID ABF76959 standard; DNA; 13 BP.
 XX
 XX ABF76959;
 XX
 XX 22-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 176956 for detecting SNP TSC0043904.
 DE
 XX
 XX SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.

XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 CC
 CC Claim 1, SEQ ID NO 176956; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4374 CCCCTCAATATT 4386
 DB 1 CCCCTCAATATT 13
 RESULT 183
 ABC75852
 ID ABC75852 standard; DNA; 13 BP.
 XX
 XX ABC75852;
 XX
 XX 21-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 75869 for detecting SNP TSC0019439.
 DE
 XX
 XX SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine

CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABP00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 0 C; 0 G; 6 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.3%; Score 13; DB 1; Length 13;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4383 TATTTTAAAAAT 4395
DB 13 TATTTTAAAAAT 1

RESULT 179
ABF42913/C
ID ABF42913 standard; DNA; 13 BP.

XX ABF42913;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 142910 for detecting SNP TSC0035848.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 142910; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABP00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.3%; Score 13; DB 1; Length 13;
Matches 13; Conservative 100.0%; Pred. No. 1.2e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 93 TTTTGAATTTTG 105
DB 13 TTTTGAATTTTG 1

RESULT 180
ABH18737
ID ABH18737 standard; DNA; 13 BP.

XX ABH18737;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 218714 for detecting SNP TSC0053197.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 218714; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABP00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.3%; Score 13; DB 1; Length 13;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4324 TTTTAAACTCAA 4336
DB 1 TTTTAAACTCAA 13

RESULT 181

ABF74976/C
ID ABF74976 standard; DNA; 13 BP.

XX ABF74976;

XX	WP1; 2001-657177/75.
DR	
PT	Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX	
P8	Claim 1; SEQ ID NO 88739; 29pp + Sequence Listing; German.
XX	
CC	This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABR00010-ABR99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
CC	
SQ	Sequence 13 BP; 7 A; 0 C; 0 G; 6 T; 0 U; 0 Other;
Query Match	0.3%; Score 13; DB 1; Length 13;
Best Local Similarity	100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative	0; Mismatches 0; Indels 0; Gaps 0
Oy	4384 ATTTTAAATA 4396 1 ATTTTAAATA 13
Db	
RESULT 178	
ABC88722/c	
ID	ABC88722 standard; DNA; 13 BP.
XX	
AC	ABC88722;
XX	
DT	21-FEB-2002 (first entry)
XX	
DE	Oligonucleotide SEQ ID NO 88739 for detecting SNP TSC0022229.
XX	
KX	SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW	peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM	central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX	
OS	Homo sapiens.
XX	
PN	WO200177384-A2.
PD	
PD	18-OCT-2001.
XX	
PF	06-APR-2001; 2001WO-IB000713.
XX	
PR	07-APR-2000; 2000DE-01019173.
XX	
PA	(EPIG-) EPIGENOMICS AG.
XX	
PI	Olek A, Piepenbrock C, Berlin K;
XX	
DR	WIPI; 2001-657177/75.
XX	
PT	Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX	
P8	Claim 1; SEQ ID NO 88739; 29pp + Sequence Listing; German.
XX	
CC	This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC	

XX SQ Sequence 13 BP; 3 A; 1 C; 0 G; 9 T; 0 U; 0 Other;
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1198 AAAATAGTAAAT 1210
DB 13 AAAATAGTAAAT 1
RESULT 174
ABH48163/C
ID ABH48163 standard; DNA; 13 BP.
XX AC ABH48163;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 248140 for detecting SNP TSC0060641.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIC-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX CC
XX PS Claim 1; SEQ ID NO 248140; 29bp + Sequence listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 143 GTTAAATGTTAA 155
DB 13 GTTAAATGTTAA 1
RESULT 175

ABC93519
ID ABC93519 standard; DNA; 13 BP.
XX AC ABC93519;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 93536 for detecting SNP TSC0023374.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIC-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX CC
XX PS Claim 1; SEQ ID NO 93536; 29bp + Sequence listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 11 A; 0 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 2874 AAAATATATAAAA 2886
DB 1 AAAATATATAAAA 13
RESULT 176
ABC75853/C
ID ABC75853 standard; DNA; 13 BP.
XX AC ABC75853;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 75870 for detecting SNP TSC0019439.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX

PR 07-APR-2000; 2000DE-01019173.
 XX (EPIC-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 154066; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABT00010-ABT2073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4300 TAAATCCCTAAC 4312
 DB 1 TAAATCCCTAAC 13
 ID ABF83172 standard; DNA; 13 BP.
 AC ABF83172;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 183169 for detecting SNP TSC0045230.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIC-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 183169; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABT00010-ABT2073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 8 A; 0 C; 0 G; 5 T; 0 U; 0 Other;
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 153 ATATTTTATTTA 165
 DB 13 ATATTTTATTTA 1
 ID ABH09679 standard; DNA; 13 BP.
 AC ABH09679;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 209656 for detecting SNP TSC0051193.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KM central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIC-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 209656; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG9989, ABP00010-ABP9989, ABH00010-ABH9989 and ABT00010-ABT2073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW	peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW	central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS	Homo sapiens.
PN	WO200177384-A2.
PD	18-OCT-2001.
XX	
PF	06-APR-2001; 2001WO-IB000713.
XX	
PR	07-APR-2000; 2000DE-01019173.
PA	(EPIC-) EPIGENOMICS AG.
PI	Olek A, Piepenbrock C, Berlin K;
XX	
DR	WPI, 2001-657177/75.
XX	
PT	Set of oligonucleotides, useful for diagnosis and cell typing, is
PT	designed to detect single-nucleotide polymorphisms and cytosine
PT	methylation status.
XX	
PS	Claim 1; SEQ ID NO 203612; 29pp + Sequence Listing; German.
XX	
CC	This invention describes novel oligonucleotide primers or peptide nucleic
CC	acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC	and cytosine methylation status in chemically pretreated genomic DNA. The
CC	oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC	range of diseases including immune system, gastrointestinal, respiratory,
CC	central nervous system, cardiovascular and metabolic disorders. The
CC	oligomers are also used for detecting cell type differentiation. ABC00010
CC	-ABC99989, ABE00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC	represent the oligomers described in the invention. NOTE: The sequence
CC	data for this patent did not form part of the printed specification, but
CC	was obtained in electronic format from WIPO at
CC	ftp.wipo.int/pub/published_pct_sequences
XX	
XX	Sequence 13 BP; 8 A; 4 C; 0 G; 1 T; 0 U; 0 Other;
XX	
XX	Query Match 0.3%; Score 13; DB 1; Length 13;
XX	Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX	Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	2343 AAACCACTAACAA 2355
DB	1 AAACCACTAACAA 13
XX	
XX	RESULT 171
XX	ABF54069
ID	ABF54069 standard; DNA; 13 BP.
XX	
AC	ABF54069;
XX	
DT	21-FEB-2002 (first entry)
XX	
DE	Oligonucleotide SEQ ID NO 154066 for detecting SNP TSC0000578.
XX	
KM	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW	peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW	central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX	
OS	Homo sapiens.
XX	
PN	WO200177384-A2.
PD	18-OCT-2001.
XX	
PF	06-APR-2001; 2001WO-IB000713.
XX	
PR	07-APR-2000; 2000DE-01019173.
PA	(EPIC-) EPIGENOMICS AG.
PI	Olek A, Piepenbrock C, Berlin K;
XX	
DR	WPI, 2001-657177/75.
XX	
PT	Set of oligonucleotides, useful for diagnosis and cell typing, is
PT	designed to detect single-nucleotide polymorphisms and cytosine
PT	methylation status.
XX	
PS	Claim 1; SEQ ID NO 203612; 29pp + Sequence Listing; German.
XX	
CC	This invention describes novel oligonucleotide primers or peptide nucleic
CC	acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC	and cytosine methylation status in chemically pretreated genomic DNA. The
CC	oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC	range of diseases including immune system, gastrointestinal, respiratory,
CC	central nervous system, cardiovascular and metabolic disorders. The
CC	oligomers are also used for detecting cell type differentiation. ABC00010
CC	-ABC99989, ABE00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC	represent the oligomers described in the invention. NOTE: The sequence
CC	data for this patent did not form part of the printed specification, but
CC	was obtained in electronic format from WIPO at
CC	ftp.wipo.int/pub/published_pct_sequences
XX	
XX	Sequence 13 BP; 8 A; 4 C; 0 G; 1 T; 0 U; 0 Other;
XX	
XX	Query Match 0.3%; Score 13; DB 1; Length 13;
XX	Best Local Similarity 100.0%; Pred. No. 1.2e+02;
XX	Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	2343 AAACCACTAACAA 2355
DB	1 AAACCACTAACAA 13
XX	
XX	RESULT 171
XX	ABF54069
ID	ABF54069 standard; DNA; 13 BP.
XX	
AC	ABF54069;
XX	
DT	21-FEB-2002 (first entry)
XX	
DE	Oligonucleotide SEQ ID NO 154066 for detecting SNP TSC0000578.
XX	
KM	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW	peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW	central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX	
OS	Homo sapiens.
XX	
PN	WO200177384-A2.
PD	18-OCT-2001.
XX	
PF	06-APR-2001; 2001WO-IB000713.
XX	
PR	07-APR-2000; 2000DE-01019173.
PA	(EPIC-) EPIGENOMICS AG.
PI	Olek A, Piepenbrock C, Berlin K;
XX	
DR	WPI, 2001-657177/75.
XX	
PT	Set of oligonucleotides, useful for diagnosis and cell typing, is
PT	designed to detect single-nucleotide polymorphisms and cytosine
PT	methylation status.
XX	
PS	Claim 1; SEQ ID NO 203612; 29pp + Sequence Listing; German.
XX	
CC	This invention describes novel oligonucleotide primers or peptide nucleic
CC	acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC	and cytosine methylation status in chemically pretreated genomic DNA. The
CC	oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC	range of diseases including immune system, gastrointestinal, respiratory,
CC	central nervous system, cardiovascular and metabolic disorders. The
CC	oligomers are also used for detecting cell type differentiation. ABC00010
CC</	

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1, SEQ ID NO 61221; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 916 TGTGAGGGGAG 928
DB 1 TGTGAGGGGAG 13

RESULT 167
ABC38595/c
ID ABC38595 standard; DNA; 13 BP.
XX
XX ABC38595;
XX
XX 20-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 36612 for detecting SNP TSC0011898.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1, SEQ ID NO 36612; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 9 G; 2 T; 0 U; 0 Other;

CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3760 TTTTATGAATG 3772
DB 13 TTTTATGAATG 1

RESULT 168
ABC38904/c
ID ABC38904 standard; DNA; 13 BP.
XX
XX ABC38904;
XX
XX 20-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 38921 for detecting SNP TSC0011982.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1, SEQ ID NO 38921; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1652 TAACTTTACAT 1664

AC ABH61838;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 261815 for detecting SNP TSC0063522.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 261815, 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SO Sequence 13 BP; 6 A; 0 C; 1 G; 6 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 DB 674 TTAACTTAAATT 686
 13 TTAACTTAAATT 1
 XX
 RESULT 165
 ABC93209/c
 ID ABC93209 standard; DNA; 13 BP.
 AC ABC93209;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 93226 for detecting SNP TSC0023296.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 93226; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SO Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 DB 3647 TTTTATGCTTTG 3659
 13 TTTTATGCTTTAG 1
 XX
 RESULT 166
 ABC61204
 ID ABC61204 standard; DNA; 13 BP.
 AC ABC61204;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 61221 for detecting SNP TSC0016301.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX

AC ABH61838;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 261815 for detecting SNP TSC0063522.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 261815, 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SO Sequence 13 BP; 6 A; 0 C; 1 G; 6 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 DB 674 TTAACTTAAATT 686
 13 TTAACTTAAATT 1
 XX
 RESULT 165
 ABC93209/c
 ID ABC93209 standard; DNA; 13 BP.
 AC ABC93209;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 93226 for detecting SNP TSC0023296.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX

XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 93226; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SO Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 DB 3647 TTTTATGCTTTG 3659
 13 TTTTATGCTTTAG 1
 XX
 RESULT 166
 ABC61204
 ID ABC61204 standard; DNA; 13 BP.
 AC ABC61204;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 61221 for detecting SNP TSC0016301.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX

CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB102073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2539 TAGCTTTAAAC 2551

DB 13 TAGCTTTAAAC 1

RESULT 162

ABF93900 ID ABF93900 standard; DNA; 13 BP.

XX ABF93900;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 193897 for detecting SNP TSC0047679.

XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 193897; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB102073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 7 A; 0 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4801 TAGAATATTAATT 4813

DB 1 TAGAATATTAATT 13

RESULT 163

ABH23867/C ID ABH23867 standard; DNA; 13 BP.

XX ABH23867;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 223844 for detecting SNP TSC0054506.

XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 223844; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB102073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 1 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1202 TAGTAATTAATT 1214

DB 13 TAGTAATTAATT 1

RESULT 164

ABH61838/C ID ABH61838 standard; DNA; 13 BP.

XX

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS Claim 1; SEQ ID NO 61722; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 2 A; 0 C; 0 G; 11 T; 0 U; 0 Other;
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2873 AAAAATATAAAA 2885
 DB 13 AAAAATATAAAA 1
 RESULT 160
 ID ABC38905
 AC ABC38905 standard; DNA; 13 BP.
 XX ABC38905;
 DT 20-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 38922 for detecting SNP TSC0011882.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA

XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS Claim 1; SEQ ID NO 38922; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1652 TAACTTACCAT 1664
 DB 1 TAACTTACCAT 13
 RESULT 161
 ID ABH17340/C
 AC ABH17340;
 XX ABH17340;
 DT 22-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 217317 for detecting SNP TSC0052834.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS Claim 1; SEQ ID NO 217317; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 5 A; 1 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4801 TAGAATATTAATT 4813

DB 13 TAGAATATTAATT 1

RESULT 157

ABC28196
ID ABC28196 standard; DNA; 13 BP.

XX ABC28196;

XX 20-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 28213 for detecting SNP TSC0007986.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX MO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

PS Claim 1; SEQ ID NO 28213; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC93989, ABP00010-ABF93989, ABH00010-ABH93989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 0 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1588 GTTGTGAGTGTGTA 1600

DB 1 GTTGTGAGTGTGTA 13

RESULT 158
ABF08586
ID ABF08586 standard; DNA; 13 BP.

XX ABF08586;

XX 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 108583 for detecting SNP TSC0027160.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX MO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

PS Claim 1; SEQ ID NO 108583; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC93989, ABP00010-ABF93989, ABH00010-ABH93989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1209 ATTATATTTGCT 1221

DB 1 ATTATATTTGCT 13

RESULT 159

ABC61705/C
ID ABC61705 standard; DNA; 13 BP.

XX ABC61705;

XX 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 61722 for detecting SNP TSC0016411.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

PF 06-APR-2001; 2001WO-IB000713.
XX
PS 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
PS Claim 1; SEQ ID NO 262455; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 142 TGTTTAATGTTAT 154
DB 1 TGTTTAATGTTAT 13
XX
RESULT 155
ABF08587/C
ID ABF08587 standard; DNA; 13 BP.
XX
AC ABF08587;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 108584 for detecting SNP TSC0027160.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX
PS Claim 1; SEQ ID NO 108584; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 1209 ATTATATTGTCG 1221
DB 13 ATTATATTGTCG 1
XX
RESULT 156
ABF93901/C
ID ABF93901 standard; DNA; 13 BP.
XX
AC ABF93901;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 193898 for detecting SNP TSC0047679.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
PS Claim 1; SEQ ID NO 193898; 29bp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but

QY 3463 GGTGATGTTAGTG 3475
 DB |||||
 1 GGTGATGTTAGTG 13
 RESULT 152
 ABH44072
 ID ABH44072 standard; DNA; 13 BP.
 AC ABH44072;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 244049 for detecting SNP TSC0059546.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 CC
 CC Claim 1; SEQ ID NO 244049; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 9 A; 0 C; 1 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1194 AATATAATAGTA 1206
 DB |||||
 1 AATATAATAGTA 13
 RESULT 153
 ABH62152
 ID ABH62152 standard; DNA; 13 BP.
 AC ABH62152;
 XX
 DT 22-FEB-2002 (first entry)

XX
 DE Oligonucleotide SEQ ID NO 262129 for detecting SNP TSC0063598.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 CC
 CC Claim 1; SEQ ID NO 262129; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 8 A; 0 C; 1 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4802 AGAATATAATTA 4814
 DB |||||
 1 AGAATATAATTA 13
 RESULT 154
 ABH62478
 ID ABH62478 standard; DNA; 13 BP.
 AC ABH62478;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 262455 for detecting SNP TSC0063663.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.

DR WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 223843; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 0 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1202 TAGTAAATTAAT 1214
 |||||
 1. TAGTAAATTAAT 13

Db

RESULT 150
 ABH27671/c
 ID ABH27671 standard; DNA; 13 BP.

XX ABH27671;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 227648 for detecting SNP TSC005515.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 227648; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 2 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4876 TCGAAAAATTAATA 4888
 |||||
 13 TCGAAAAATTAATA 1

Db

RESULT 151
 ABF80046
 ID ABF80046 standard; DNA; 13 BP.

XX ABF80046;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 180043 for detecting SNP TSC0044583.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 180043; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

ID ABC53972 standard; DNA; 13 BP.
 AC ABC53972;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 53989 for detecting SNP TSC0014846.
 XX
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIC-) EPIDENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 53989; 29bp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 7 A; 0 C; 0 G; 6 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4381 AATATTTTAAAA 4393
 DB 1 AATATTTTAAAA 13
 XX
 RESULT 148
 ABC87969
 ID ABC87969 standard; DNA; 13 BP.
 XX
 AC ABC87969;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 87986 for detecting SNP TSC0022114.
 XX
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX

XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIC-) EPIDENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 87986; 29bp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 10 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 13; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2875 AATATTAATAAT 2887
 DB 1 AATATTAATAATAAT 13
 XX
 RESULT 149
 ABH23866
 ID ABH23866 standard; DNA; 13 BP.
 XX
 AC ABH23866;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 223843 for detecting SNP TSC0054506.
 XX
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIC-) EPIDENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC ftp.wipo.int/pub/published_pct_sequences

CC Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4188 CATACTTCCTTAA 4200
DB 1 CATACTTCCTTAA 13

RESULT 145

ABF96987/C
ID ABF96987 standard; DNA; 13 BP.

AC ABF96987;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 196984 for detecting SNP TSC0008717.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.

XX MO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1, SEQ ID NO 196984; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX ftp.wipo.int/pub/published_pct_sequences

SEQ Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 635 TATTATTAATGT 647
DB 13 TATTATTAATGT 1

RESULT 146

ABH09678
ID ABH09678 standard; DNA; 13 BP.

AC ABH09678;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 209655 for detecting SNP TSC0051193.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.

XX MO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1, SEQ ID NO 209655; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 9 A; 0 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1198 AAAATAGTAAAT 1210
DB 1 AAAATAGTAAAT 13

RESULT 147

ABC53972

XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIC-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 71222; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, cardiovascular, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;

Query Match 0.2%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 93 TTTTGAATTTT 104
 13 TTTTGAATTTT 2

RESULT 291
 ABC71204
 ID ABC71204 standard; DNA; 13 BP.
 XX ABC71204;

AC 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 71221 for detecting SNP TSC0018455.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX

OS Homo sapiens.

XX WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIC-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

PS Claim 1; SEQ ID NO 71221; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;

Query Match 0.2%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 93 TTTTGAATTTT 104
 1 TTTTGAATTTT 12

Search completed: April 22, 2004, 06:33:04
 Job time : 14 secs

THIS PAGE BLANK (USPTO)

PP 10-30 MRS

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 22, 2004, 06:34:40 ; Search time 1 Seconds
(without alignments)
3.791 Million cell updates/sec

Title: us-09-555-640-1
Perfect score: 5028
Sequence: 1 gacgtcacaggaatgacgt.....acgtcattctgtgacgtc 5028

Scoring table: IDENTITY NUC
Gapop 10.0, Gapext 0.5

Searched: 21 seqs, 377 residues

Total number of hits satisfying chosen parameters: 42

Minimum DB seq length: 10
Maximum DB seq length: 30

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 24 summaries

Database: rni.seq*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	24.4	0.5	26	1	US-09-198-243-3
2	22	0.4	22	1	US-09-311-260-91
3	22	0.4	22	1	US-09-642-633A-1
4	21.4	0.4	23	1	US-09-245-248B-6
5	21	0.4	21	1	US-09-311-260-92
6	20	0.4	20	1	US-09-245-248B-10
7	20	0.4	20	1	US-09-642-633A-2
8	18.4	0.4	20	1	US-09-619-420A-2
9	15.4	0.3	17	1	US-08-390-850-588
10	15.4	0.3	17	1	US-08-373-124A-872
11	15.4	0.3	17	1	US-08-435-634-588
12	15.4	0.3	17	1	US-08-435-628-872
13	15.4	0.3	17	1	US-08-584-040-1770
14	15.4	0.3	17	1	US-08-584-040-4253
15	15.4	0.3	17	1	US-08-584-040-5823
16	15.4	0.3	17	1	US-09-371-772B-315
17	15.4	0.3	17	1	US-09-371-772B-2020
18	13	0.3	17	1	US-08-373-124B-872
19	13	0.3	17	1	US-08-435-628-872
20	12.4	0.2	26	1	US-09-198-243-3
21	12	0.2	12	1	US-08-765-340-159
22	12	0.2	12	1	US-09-772-315-1
23	12	0.2	13	1	US-09-772-315-7
24	12	0.2	13	1	US-09-367-513-4

ALIGNMENTS

RESULT 1
US-09-198-243-3
Sequence 3, Application US/09198243
Patent No. 6183999

GENERAL INFORMATION:
APPLICANT: WEIMER, Thomas
APPLICANT: GROENER, Albrecht
TITLE OF INVENTION: Procedure for the detection of high virus concentrations in blood plasma and/or blood serum by means of the polymerase chain reaction
FILE REFERENCE: 06478.1419-00000
CURRENT APPLICATION NUMBER: US/09/198,243
CURRENT FILING DATE: 1998-11-24
EARLIER APPLICATION NUMBER: P 197 52 898.9
EARLIER FILING DATE: 1997-11-28
NUMBER OF SEQ ID NOS: 3
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 3
LENGTH: 26
TYPE: DNA
ORGANISM: Parvovirus B19
FEATURE:
OTHER INFORMATION:
NAME/KEY: modified_base
LOCATION: (1)
OTHER INFORMATION: FAM, carboxy fluorescein substitution
FEATURE:
NAME/KEY: modified_base
LOCATION: (26)
OTHER INFORMATION: TAMRA, carboxytetramethylrhodamine substitution
US-09-198-243-3

Query Match 0.5%; Score 24.4; DB 1; Length 26;
Best Local Similarity 96.2%; Pred. No. 1.3;
Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1430 TGGTGTCTGGGATGAAGGCATTATT 1455
DB 1 TGGTGTCTGGGATGAAGGCATTATT 26

RESULT 2
US-09-311-260-91
Sequence 91, Application US/09311260
Patent No. 6214555
GENERAL INFORMATION:
APPLICANT: Leushner, James
APPLICANT: Hui, May
APPLICANT: Dunn, James M.
APPLICANT: LaCroix, Jean-Michel
TITLE OF INVENTION: METHOD, COMPOSITIONS AND KIT FOR DETECTION OF MICROORGANISMS AND BI-DIRECTIONAL SEQUENCING OF NUCLEIC ACID
TITLE OF INVENTION: POLYMERS
NUMBER OF SEQUENCES: 189
CORRESPONDENCE ADDRESS:
ADDRESSEE: Opedahl & Larson LLP
STREET: P.O. Box 5270
CITY: Frisco
STATE: CO
COUNTRY: US
ZIP: 80443-5270
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage
COMPUTER: IBM compatible
OPERATING SYSTEM: MS DOS
SOFTWARE: Word Perfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/311,260
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Larson, Marina T.
REGISTRATION NUMBER: 32,038

parkin640-1.rni

Thu Apr 22 06:52:32 2004

REFERENCE/DOCKET NUMBER: VGEN.P-058-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (970) 668-2050
TELEFAX: (970) 668-2082
TELEX:
INFORMATION FOR SEQ ID NO: 91:
SEQUENCE CHARACTERISTICS:
LENGTH: 22
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
HYPOTHETICAL: no
ANTI-SENSE: yes
FRAGMENT TYPE: internal
US-09-311-260-91

Query Match 0.4%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.9;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2429 GGAACAGACTTAGCTTATTC 2450
DB 1 GGAACAGACTTAGCTTATTC 22

RESULT 3
US-09-642-633A-1
Sequence 1, Application US/09642633A
Patent No. 6649339
GENERAL INFORMATION:
APPLICANT: Baxter Aktiengesellschaft
APPLICANT: Zerlauth, Gerold
APPLICANT: Gessner, Matthias
APPLICANT: Koethnitz, Karl
APPLICANT: Gross, Patricia
TITLE OF INVENTION: A Method for Producing a Quality Assured
FILE REFERENCE: 236.00
CURRENT APPLICATION NUMBER: US/09/642.633A
CURRENT FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: A1443/99
PRIOR FILING DATE: 1999-08-20
PRIOR APPLICATION NUMBER: PC/EP96/12345
PRIOR FILING DATE: 1996-12-31
NUMBER OF SEQ ID NOS: 3
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 1
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: PCR primer
US-09-642-633A-1

Query Match 0.4%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.9;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2589 GACAGTTATCTGACCAACCCCA 2610
DB 1 GACAGTTATCTGACCAACCCCA 22

RESULT 4
US-09-245-248B-6
Sequence 6, Application US/09245248B
Patent No. 6395472
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Leary, Thomas
APPLICANT: Erker, James
APPLICANT: Chalmers, Michelle

APPLICANT: Simons, John
APPLICANT: Birkenmeyer, Larry
APPLICANT: Muehthoff, Scott
APPLICANT: Pilot-Matias, Tami
APPLICANT: Desai, Suresh
APPLICANT: Mushahwar, Isa
TITLE OF INVENTION: METHODS OF UTILIZING THE TT VIRUS
FILE REFERENCE: 6461.US.01
CURRENT APPLICATION NUMBER: US/09/245,248B
CURRENT FILING DATE: 1999-02-05
NUMBER OF SEQ ID NOS: 71
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 6
LENGTH: 23
TYPE: DNA
ORGANISM: Homo sapien
FEATURE:
NAME/KEY: primer bind
LOCATION: (0)...(0)
OTHER INFORMATION: B19-Reverse primer
US-09-245-248B-6

Query Match 0.4%; Score 21.4; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 2.6;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3015 GCATGACTTCAGTTAACTGCA 3037
DB 1 GCATGACTTCAGTTAACTGCA 23

RESULT 5
US-09-311-260-92/c
Sequence 92, Application US/09311260
Patent No. 6214555
GENERAL INFORMATION:
APPLICANT: Leushner, James
APPLICANT: Hui, May
APPLICANT: Dunn, James M.
APPLICANT: LaCroix, Jean-Michel
TITLE OF INVENTION: METHOD, COMPOSITIONS AND KIT FOR DETECTION OF
TITLE OF INVENTION: MICROORGANISMS AND BI-DIRECTIONAL SEQUENCING OF NUCLEIC ACID
TITLE OF INVENTION: POLYMERS
NUMBER OF SEQUENCES: 189
CORRESPONDENCE ADDRESS:
ADDRESSEE: Oppedahl & Larson LLP
STREET: P.O. Box 5270
CITY: Frisco
STATE: CO
COUNTRY: US
ZIP: 80443-5270
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage.
COMPUTER: IBM compatible
OPERATING SYSTEM: MS DOS
SOFTWARE: Word Perfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/311,260
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Larson, Marina T.
REGISTRATION NUMBER: 32,038
REFERENCE/DOCKET NUMBER: VGEN.P-058-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (970) 668-2050
TELEFAX: (970) 668-2082
TELEX:
INFORMATION FOR SEQ ID NO: 92:
SEQUENCE CHARACTERISTICS:

```
/ LENGTH: 21
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: other nucleic acid
/ HYPOTHETICAL: no
/ ANTI-SENSE: no
/ FRAGMENT TYPE: internal
/ US-09-311-260-92

Query Match          0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2667 CTAGTGAAGACTTACACAGC 2687
Db 21 CTAGTGAAGACTTACACAGC 1

RESULT 6
US-09-245-248B-10/c
/ Sequence 10, Application US/09245248B
/ Patent No. 6395472
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Leary, Thomas
/ APPLICANT: Erker, James
/ APPLICANT: Chalmers, Michelle
/ APPLICANT: Simons, John
/ APPLICANT: Birkenmeyer, Larry
/ APPLICANT: Muerhoff, Scott
/ APPLICANT: Pilot-Matias, Tami
/ APPLICANT: Desai, Suresh
/ APPLICANT: Mushahwar, Isa
/ TITLE OF INVENTION: METHODS OF UTILIZING THE TT VIRUS
/ FILE REFERENCE: 6461.US.01
/ CURRENT APPLICATION NUMBER: US/09/245,248B
/ CURRENT FILING DATE: 1999-02-05
/ NUMBER OF SEQ ID NOS: 71
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 10
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Homo sapien
/ FEATURE:
/ NAME/KEY: primer bind
/ LOCATION: (0)...(0)
/ OTHER INFORMATION: B19.2119-al primer
/ US-09-245-248B-10

Query Match          0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1992 CGGAAGCCCGAGTTTCTCCG 2011
Db 20 CGGAAGCCCGAGTTTCTCCG 1

RESULT 7
US-09-642-633A-2/c
/ Sequence 2, Application US/09642633A
/ Patent No. 6649339
/ GENERAL INFORMATION:
/ APPLICANT: Baxter Aktiengesellschaft
/ APPLICANT: Zerlauth, Gerold
/ APPLICANT: Gesner, Matthias
/ APPLICANT: Koettnitz, Karl
/ APPLICANT: Gross, Patricia
/ TITLE OF INVENTION: A Method for Producing a Quality Assured
/ TITLE OF INVENTION: Biological Sample and Composition Containing the Same
/ FILE REFERENCE: 236.00
/ CURRENT APPLICATION NUMBER: US/09/642,633A

/ LENGTH: 21
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: other nucleic acid
/ HYPOTHETICAL: no
/ ANTI-SENSE: no
/ FRAGMENT TYPE: internal
/ US-09-311-260-92

Query Match          0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2667 CTAGTGAAGACTTACACAGC 2687
Db 21 CTAGTGAAGACTTACACAGC 1

RESULT 6
US-09-245-248B-10/c
/ Sequence 10, Application US/09245248B
/ Patent No. 6395472
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Leary, Thomas
/ APPLICANT: Erker, James
/ APPLICANT: Chalmers, Michelle
/ APPLICANT: Simons, John
/ APPLICANT: Birkenmeyer, Larry
/ APPLICANT: Muerhoff, Scott
/ APPLICANT: Pilot-Matias, Tami
/ APPLICANT: Desai, Suresh
/ APPLICANT: Mushahwar, Isa
/ TITLE OF INVENTION: METHODS OF UTILIZING THE TT VIRUS
/ FILE REFERENCE: 6461.US.01
/ CURRENT APPLICATION NUMBER: US/09/245,248B
/ CURRENT FILING DATE: 1999-02-05
/ NUMBER OF SEQ ID NOS: 71
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 10
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Homo sapien
/ FEATURE:
/ NAME/KEY: primer bind
/ LOCATION: (0)...(0)
/ OTHER INFORMATION: B19.2119-al primer
/ US-09-245-248B-10

Query Match          0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1992 CGGAAGCCCGAGTTTCTCCG 2011
Db 20 CGGAAGCCCGAGTTTCTCCG 1

RESULT 7
US-09-642-633A-2/c
/ Sequence 2, Application US/09642633A
/ Patent No. 6649339
/ GENERAL INFORMATION:
/ APPLICANT: Baxter Aktiengesellschaft
/ APPLICANT: Zerlauth, Gerold
/ APPLICANT: Gesner, Matthias
/ APPLICANT: Koettnitz, Karl
/ APPLICANT: Gross, Patricia
/ TITLE OF INVENTION: A Method for Producing a Quality Assured
/ TITLE OF INVENTION: Biological Sample and Composition Containing the Same
/ FILE REFERENCE: 236.00
/ CURRENT APPLICATION NUMBER: US/09/642,633A

/ CURRENT FILING DATE: 2000-08-18
/ PRIOR APPLICATION NUMBER: A1443/99
/ PRIOR FILING DATE: 1999-08-20
/ PRIOR APPLICATION NUMBER: PCT/EP96/12345
/ PRIOR FILING DATE: 1996-12-31
/ NUMBER OF SEQ ID NOS: 3
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 2
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: PCR primer
/ US-09-642-633A-2

Query Match          0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2682 ACAAGCCTGGCAAGTTAGC 2701
Db 20 ACAAGCCTGGCAAGTTAGC 1

RESULT 8
US-09-619-420A-2/c
/ Sequence 2, Application US/09619420A
/ Patent No. 6642033
/ GENERAL INFORMATION:
/ APPLICANT: LAZO, ARISTIDES
/ APPLICANT: ZHAO, XIAOJUAN
/ APPLICANT: TASSELLO, JODIE ANN
/ APPLICANT: GIBAJA, VERONICA
/ TITLE OF INVENTION: NUCLEIC ACIDS FOR DETECTING PARVOVIRUS AND METHODS OF
/ TITLE OF INVENTION: USING SAME
/ FILE REFERENCE: 18242-S03 US
/ CURRENT APPLICATION NUMBER: US/09/619,420A
/ CURRENT FILING DATE: 2000-07-19
/ PRIOR APPLICATION NUMBER: USSN 60/144,721
/ PRIOR FILING DATE: 1999-07-20
/ NUMBER OF SEQ ID NOS: 10
/ SOFTWARE: Patentin Ver. 2.0
/ SEQ ID NO 2
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: VINS-3R PRIMER
/ US-09-619-420A-2

Query Match          0.4%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 5;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 414 AGATACTTCTGACTGGGAAC 433
Db 20 AGACACTTCTGACTGGGAAC 1

RESULT 9
US-08-390-850-588
/ Sequence 588, Application US/08390850
/ Patent No. 5612215
/ GENERAL INFORMATION:
/ APPLICANT: Draper, Kenneth G.
/ APPLICANT: Pavco, Pamela
/ APPLICANT: McSwiggen, James
/ APPLICANT: Gustofson, John
/ APPLICANT: Stinchcomb, Dan T.
/ TITLE OF INVENTION: METHOD AND REAGENT FOR TREATMENT
/ TITLE OF INVENTION: OF ARTHRITIC CONDITIONS
/ NUMBER OF SEQUENCES: 1151
/ CORRESPONDENCE ADDRESS:
```

ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: FastSeq version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/390,850
FILING DATE: February 17, 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/354,920
FILING DATE: December 13, 1994
APPLICATION NUMBER: 08/152,487
FILING DATE: No. 5612215ember 12, 1993
APPLICATION NUMBER: 07/989,848
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 211/084
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 588:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-390-850-588

Query Match, 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 9.1;
Matches 13; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2738 ATGAGCTACAGCTGG 2754
DB 1 AUAUGAGGUACAAGCUGG 17

RESULT 10
US-08-373-124A-872
Sequence 872, Application US/08373124A
Patent No. 5646042
GENERAL INFORMATION:
APPLICANT: Stinchcomb, Dan T.
APPLICANT: Draper, Kenneth
APPLICANT: McSwiggen, James
APPLICANT: Jarvis, Thale
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR
TITLE OF INVENTION: TREATMENT OF RESTENOSIS AND
TITLE OF INVENTION: CANCER USING RIBOZYMES
NUMBER OF SEQUENCES: 2627
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible

OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/373,124A
FILING DATE: January 13, 1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/245,466
FILING DATE: May 18, 1994
APPLICATION NUMBER: 08/192,943
FILING DATE: February 7, 1994
APPLICATION NUMBER: 07/987,132
FILING DATE: December 7, 1992
APPLICATION NUMBER: 07/936,422
FILING DATE: August 26, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 209/035
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 872:
SEQUENCE CHARACTERISTICS:
LENGTH: 17 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-373-124A-872

Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 52.9%; Pred. No. 9.1;
Matches 9; Conservative 7; Mismatches 1; Indels 0; Gaps 0;

QY 4379 CAAATATTTTAAAAAT 4395
DB 1 CAUAUUAUUUUAAAAAU 17

RESULT 11
US-08-435-634-588
Sequence 588, Application US/08435634
Patent No. 5731295
GENERAL INFORMATION:
APPLICANT: Draper, Kenneth G.
APPLICANT: Pavco, Pamela
APPLICANT: McSwiggen, James
APPLICANT: Gustofson, John
APPLICANT: Stinchcomb, Dan T.
TITLE OF INVENTION: METHOD AND REAGENT FOR TREATMENT
TITLE OF INVENTION: OF ARTHRITIC CONDITIONS
NUMBER OF SEQUENCES: 1151
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: FastSeq version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/435,634
FILING DATE: 05-MAY-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/390,850
FILING DATE: February 17, 1995


```

; APPLICATION NUMBER: 08/354,920
; FILING DATE: December 13, 1994
; APPLICATION NUMBER: 08/152,487
; FILING DATE: No. 5731295ember 12, 1993
; APPLICATION NUMBER: 07/989,848
; FILING DATE: December 7, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 211/084
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 588:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-435-634-588

Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 9.1;
Matches 13; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2738 AATGAGCTACAGCTGG 2754
||:||||:||||:|
Db 1 A AUGAGGUACAACUGG 17

RESULT 12
US-08-435-628-872
; Sequence 872, Application US/08435628
; Patent No. 581796
; GENERAL INFORMATION:
; APPLICANT: Stinchcomb, Dan T.
; APPLICANT: Draper, Kenneth
; APPLICANT: McSwiggen, James
; APPLICANT: Jarvis, Thale
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR
; TITLE OF INVENTION: TREATMENT OF RESTENOSIS AND
; TITLE OF INVENTION: CANCER USING RIBOZYMES
; NUMBER OF SEQUENCES: 2627
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/435,628
; FILING DATE: 05-MAY-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/373,124
; FILING DATE: January 13, 1995
; APPLICATION NUMBER: 08/245,466
; FILING DATE: May 18, 1994
; APPLICATION NUMBER: 08/192,943
; FILING DATE: February 7, 1994
; APPLICATION NUMBER: 07/987,132
; FILING DATE: December 7, 1992
; APPLICATION NUMBER: 07/936,422
; FILING DATE: August 26, 1992

```

```

; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 209/035
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 872:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-435-628-872

Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 52.9%; Pred. No. 9.1;
Matches 9; Conservative 7; Mismatches 1; Indels 0; Gaps 0;

QY 4379 CAAATATTTTAAAT 4395
||:||||:|
Db 1 CAUAUAUUUUAAAAU 17

RESULT 13
US-08-584-040-1770
; Sequence 1770, Application US/08584040
; Patent No. 6346398
; GENERAL INFORMATION:
; APPLICANT: Pavco, Pamela
; APPLICANT: McSwiggen, James
; APPLICANT: Stinchcomb, Dan T.
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE
; TITLE OF INVENTION: TREATMENT OF DISEASES OR
; TITLE OF INVENTION: CONDITIONS RELATED TO LEVELS
; TITLE OF INVENTION: OF VASCULAR ENDOTHELIAL
; TITLE OF INVENTION: GROWTH FACTOR
; NUMBER OF SEQUENCES: 8502
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/584,040
; FILING DATE: January 11, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/005,974
; FILING DATE: October 26, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 218/064
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 1770:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid

```

;; STRANDEDNESS: single
;; TOPOLOGY: linear
US-08-584-040-1770

Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 9.1;
Matches 11; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

Oy 2282 TGTAACTGTGAAAAA 2298
Db 1 UGUUACUUGGAAAAA 17

RESULT 14

US-08-584-040-4253/c
; Sequence 4253, Application US/08584040
; Patent No. 6346398
; GENERAL INFORMATION:
; APPLICANT: Pavco, Pamela
; APPLICANT: McSwiggen, James
; APPLICANT: Stinchcomb, Dan T.
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE
; TITLE OF INVENTION: TREATMENT OF DISEASES OR
; TITLE OF INVENTION: CONDITIONS RELATED TO LEVELS
; TITLE OF INVENTION: OF VASCULAR ENDOTHELIAL
; NUMBER OF SEQUENCES: 8502
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; STATE: Los Angeles
; COUNTRY: California
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: Storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/584,040
; FILING DATE: January 11, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/005,974
; FILING DATE: October 26, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 218/064
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 4253:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear

US-08-584-040-4253

Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 9.1;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 703 ACCAAGGAAATATTT 719
Db 17 ACCTAAGGAAATATTT 1

RESULT 15

US-08-584-040-5823/c
; Sequence 5823, Application US/08584040
; Patent No. 6346398
; GENERAL INFORMATION:
; APPLICANT: Pavco, Pamela
; APPLICANT: McSwiggen, James
; APPLICANT: Stinchcomb, Dan T.
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE
; TITLE OF INVENTION: TREATMENT OF DISEASES OR
; TITLE OF INVENTION: CONDITIONS RELATED TO LEVELS
; TITLE OF INVENTION: OF VASCULAR ENDOTHELIAL
; NUMBER OF SEQUENCES: 8502
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; STATE: Los Angeles
; COUNTRY: California
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: Storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/584,040
; FILING DATE: January 11, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/005,974
; FILING DATE: October 26, 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 218/064
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 5823:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear

US-08-584-040-5823

Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 9.1;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 703 ACCAAGGAAATATTT 719
Db 17 ACCTAAGGAAATATTT 1

RESULT 16

US-09-371-772B-315
; Sequence 315, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re

GENERAL INFORMATION: Stinchcomb, Dan T.
APPLICANT: Draper, Kenneth
APPLICANT: Draper, Kenneth
APPLICANT: McSwiggen, James
APPLICANT: Jarvis, Thale
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR
TREATMENT OF RESPIROGENIC AND
CANCER USING RIBOZYMES
TITLE OF INVENTION:

```

RESULT 19
US-08-435-628-872/c
; Sequence 872, Application US/08435628
; Patent No. 5817796
;
; GENERAL INFORMATION:
;
; APPLICANT: Stinchcomb, Dan T.
;
; APPLICANT: Draper, Kenneth
;
; APPLICANT: McSwiggen, James
;
; APPLICANT: Jarvis, Thale
;
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR
; TITLE OF INVENTION: TREATMENT OF RESTENOSIS AND
; TITLE OF INVENTION: CANCER USING RIBOZYMES
;
; NUMBER OF SEQUENCES: 2627
;
; CORRESPONDENCE ADDRESS:
;
; ADDRESSEE: Lyon & Lyon
;
; STREET: 633 West Fifth Street
;
; STREET: Suite 4700
;
; CITY: Los Angeles
;
; STATE: California
;
; COUNTRY: U.S.A.
;
; ZIP: 90071

```

```

; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: Storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/435,628
; FILING DATE: 05-MAY-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/373,124
; FILING DATE: January 13, 1995
; APPLICATION NUMBER: 08/245,466
; FILING DATE: May 18, 1994
; APPLICATION NUMBER: 08/192,943
; FILING DATE: February 7, 1994
; APPLICATION NUMBER: 07/987,132
; FILING DATE: December 7, 1992
; APPLICATION NUMBER: 07/936,422
; FILING DATE: August 26, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 209/035
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 872:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-435-628-872

```

```

Query Match 0.3%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 18;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 4384 ATTTTAAAAATA 4396
Db 17 ATTTTAAAAATA 5

```

```

RESULT 20
US-09-198-243-3/c
; Sequence 3, Application US/09198243
; Patent No. 618399
; GENERAL INFORMATION:
; APPLICANT: WEIMER, Thomas
; APPLICANT: GROENER, Albrecht
; TITLE OF INVENTION: Procedure for the detection of high virus
; TITLE OF INVENTION: concentrations in blood plasma and/or blood serum by
; TITLE OF INVENTION: means of the polymerase chain reaction
; FILE REFERENCE: 06478.1419-00000
; CURRENT APPLICATION NUMBER: US/09/198,243
; CURRENT FILING DATE: 1998-11-24
; EARLIER APPLICATION NUMBER: P 197 52 898.9
; EARLIER FILING DATE: 1997-11-28
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 26
; TYPE: DNA
; ORGANISM: Parvovirus B19
; FEATURE:
; OTHER INFORMATION:
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (1)
; OTHER INFORMATION: FAM, carboxy fluorescein substitution

```

```

; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (26)
; OTHER INFORMATION: TAMRA, carboxytetramethylrhodamine substitution
US-09-198-243-3

```

```

Query Match 0.2%; Score 12.4; DB 1; Length 26;
Best Local Similarity 72.7%; Pred. No. 27;
Matches 16; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

```

```

QY 1802 ATGCCCTCCACCAGATCTCCA 1823
Db 22 ATACCTTCATCCGACGACCACCA 1

```

```

RESULT 21
US-08-765-340-159
; Sequence 159, Application US/08765340
; Patent No. 615092
; GENERAL INFORMATION:
; APPLICANT: UCHIDA, K.,
; APPLICANT: UCHIDA, T.,
; APPLICANT: TANAKA, Y.,
; APPLICANT: MATSUDA, Y.,
; APPLICANT: KONDO, S.,
; TITLE OF INVENTION: AN ANTISENSE NUCLEIC ACID
; TITLE OF INVENTION: COMPOUND
; NUMBER OF SEQUENCES: 185
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORGAN & FINNEGAN, L.L.P.
; STREET: 345 PARK AVENUE
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10154
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version
; SOFTWARE: #1.30 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/765,340
; FILING DATE: 23-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 145146/94
; FILING DATE: 27-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 311130/94
; FILING DATE: 21-NOV-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: SERUNIAN, LESLIE
; REGISTRATION NUMBER: 35,353
; REFERENCE/DOCKET NUMBER: 1452-4005
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 758-4800
; TELEFAX: (212) 751-6849
; INFORMATION FOR SEQ ID NO: 159:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "synthetic DNA"
; US-08-765-340-159

```

```

Query Match 0.2%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 12; Conservative 0; Mismatches 0; Indels -0; Gaps 0;

```

```

QY 1582 ACATTGTGTGTG 1593

```

Db 1 ACATTGTGTG 12

RESULT 22

US-09-772-315-1/c

; Sequence 1, Application US/09772315

; Patent No. 6559125

; GENERAL INFORMATION:

; APPLICANT: DERVAN, Peter

; APPLICANT: WURTZ, Nicholas

; APPLICANT: CHANG, Aileen

; TITLE OF INVENTION: POLYAMIDE-ALKYLATOR CONJUGATES & RELATED PRODUCTS & METHODS

; FILE REFERENCE: GENESOF09/772315

; CURRENT APPLICATION NUMBER: US/09/772,315

; CURRENT FILING DATE: 2001-01-26

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 1

; LENGTH: 12

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; NAME/KEY: misc feature

; OTHER INFORMATION: Description of Artificial Sequence: Polyamide-Alkylator

; OTHER INFORMATION: Conjugate Target Sequence

US-09-772-315-1

Query Match 0.2%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 212 ATATAAGCAGCT 223

Db 12 ATATAAGCAGCT 1

RESULT 23

US-09-772-315-7/c

; Sequence 7, Application US/09772315

; Patent No. 6559125

; GENERAL INFORMATION:

; APPLICANT: DERVAN, Peter

; APPLICANT: WURTZ, Nicholas

; APPLICANT: CHANG, Aileen

; TITLE OF INVENTION: POLYAMIDE-ALKYLATOR CONJUGATES & RELATED PRODUCTS & METHODS

; FILE REFERENCE: GENESOF09/772315

; CURRENT APPLICATION NUMBER: US/09/772,315

; CURRENT FILING DATE: 2001-01-26

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 7

; LENGTH: 13

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; NAME/KEY: misc feature

; OTHER INFORMATION: Description of Artificial Sequence: Polyamide-Alkylator

; OTHER INFORMATION: Conjugate Target Sequence

US-09-772-315-7

Query Match 0.2%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 15;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 214 ATAAAGCAGCTGC 225

Db 13 ATAAAGCAGCTGC 2

RESULT 24

US-09-367-513-4

; Sequence 4, Application US/09367513

; Patent No. 6660255

; GENERAL INFORMATION:
; APPLICANT: Gottesfeld, Joel M.
; APPLICANT: Dervan, Peter B.
; APPLICANT: Mosier, Donald E.
; APPLICANT: Baird, Eldon E.
; TITLE OF INVENTION: INHIBITION OF GENE TRANSCRIPTION BY
; TITLE OF INVENTION: POLYAMIDE DNA-BINDING LIGANDS
; FILE REFERENCE: 27801-20012.00
; CURRENT APPLICATION NUMBER: US/09/367,513
; CURRENT FILING DATE: 2000-04-25
; PRIOR APPLICATION NUMBER: US 60/038,384
; PRIOR FILING DATE: 1997-02-14
; PRIOR APPLICATION NUMBER: US 60/038,394
; PRIOR FILING DATE: 1997-02-14
; PRIOR APPLICATION NUMBER: US 60/(CIT2683)
; PRIOR FILING DATE: 1997-09-02
; PRIOR APPLICATION NUMBER: US 60/(CIT2684)
; PRIOR FILING DATE: 1997-09-10
; PRIOR APPLICATION NUMBER: US 08/853,022
; PRIOR FILING DATE: 1997-04-21
; PRIOR APPLICATION NUMBER: PCT/US97/12722
; PRIOR FILING DATE: 1997-07-21
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 13
; TYPE: DNA
; ORGANISM: HIV
US-09-367-513-4

Query Match 0.2%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 15;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 212 ATATAAGCAGCT 223

Db 2 ATATAAGCAGCT 13

Search completed: April 22, 2004, 06:34:42
Job time: 1 secs

THIS PAGE BLANK (USPTO)

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 22, 2004, 06:36:27 ; Search time 1 Seconds
(without alignments)
5.611 Million cell updates/sec

Title: us-09-555-640-1
Perfect score: 5028
Sequence: 1 gacgtcacaggaatgacgt.....acgtcatttcctgtgacgtc 5028

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 26 seqs, 558 residues

Total number of hits satisfying chosen parameters: 52

Minimum DB seq length: 10
Maximum DB seq length: 30

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 26 summaries

Database : rnpb.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	27.4	0.5	29	1 US-10-231-843-14	Sequence 14, Appl
2	27	0.5	28	1 US-10-231-843-1	Sequence 1, Appl
3	27	0.5	28	1 US-10-231-843-22	Sequence 22, Appl
4	25	0.5	25	1 US-10-231-843-17	Sequence 17, Appl
5	23.4	0.5	25	1 US-10-231-843-15	Sequence 15, Appl
6	23.4	0.5	25	1 US-10-231-843-37	Sequence 37, Appl
7	22.4	0.4	24	1 US-10-187-253A-38	Sequence 38, Appl
8	22	0.4	22	1 US-09-802-110B-91	Sequence 91, Appl
9	22	0.4	22	1 US-10-231-843-18	Sequence 18, Appl
10	22	0.4	22	1 US-10-231-843-28	Sequence 28, Appl
11	21.4	0.4	23	1 US-09-815-656-6	Sequence 6, Appl
12	21	0.4	21	1 US-09-802-110B-92	Sequence 92, Appl
13	21	0.4	21	1 US-10-231-843-30	Sequence 30, Appl
14	21	0.4	21	1 US-10-231-843-31	Sequence 31, Appl
15	21	0.4	21	1 US-10-231-843-32	Sequence 32, Appl
16	20	0.4	20	1 US-09-815-656-10	Sequence 10, Appl
17	18.4	0.4	20	1 US-10-231-843-27	Sequence 27, Appl
18	18.4	0.4	20	1 US-10-187-253A-37	Sequence 37, Appl
19	18	0.4	18	1 US-10-231-843-39	Sequence 39, Appl
20	18	0.4	18	1 US-10-231-843-40	Sequence 40, Appl
21	17.4	0.3	19	1 US-10-187-253A-59	Sequence 59, Appl
22	16.4	0.3	18	1 US-10-231-843-38	Sequence 38, Appl
23	16	0.3	17	1 US-09-827-395A-840	Sequence 840, App
24	16	0.3	17	1 US-09-827-395A-1020	Sequence 1020, Ap
25	16	0.3	17	1 US-10-430-882-840	Sequence 840, App
26	16	0.3	17	1 US-10-430-882-1020	Sequence 1020, Ap

ALIGNMENTS

RESULT 1
US-10-231-843-14

; Sequence 14, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GP132-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; PRIOR FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 14
; LENGTH: 29
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-14

Query Match 0.5%; Score 27.4; DB 1; Length 29;
Best Local Similarity 96.6%; Pred. No. 2.9;
Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2551 CTCCTCAGACCTATAGTCATCATTTTC 2579
Db 1 CTCCTCAGACTTATATAGTCATCATTTTC 29

RESULT 2
US-10-231-843-1/c
; Sequence 1, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GP132-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; PRIOR FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 28
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-1

Query Match 0.5%; Score 27; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 2.9;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2786 AGGATTCATGACTTTAGGTATAGCCAA 2812
Db 28 AGGATTCATGACTTTAGGTATAGCCAA 2

RESULT 3
US-10-231-843-22
; Sequence 22, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita

```
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 22
; LENGTH: 28
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-22

Query Match          0.5%; Score 27; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 2.9;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2786 AGGATTATCTGACCTTTAGGTATAGCCAA 2812
DB 1 AGGATTATCTGACCTTTAGGTATAGCCAA 27
|||||

RESULT 4
US-10-231-843-17
; Sequence 17, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 17
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-17

Query Match          0.5%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2589 GACAGTTATCTGACCAACCCCAATGC 2613
DB 1 GACAGTTATCTGACCAACCCCAATGC 25
|||||

RESULT 5
US-10-231-843-15
; Sequence 15, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
```

```
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 15
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-15

Query Match          0.5%; Score 23.4; DB 1; Length 25;
Best Local Similarity 96.0%; Pred. No. 5.3;
Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2551 CTCTCCAGACTTATATAGTCATCAT 2575
DB 1 CTCTCCAGACTTATATAGTCATCAT 25
|||||

RESULT 6
US-10-231-843-37
; Sequence 37, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 37
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-37

Query Match          0.5%; Score 23.4; DB 1; Length 25;
Best Local Similarity 96.0%; Pred. No. 5.3;
Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2551 CTCTCCAGACTTATATAGTCATCAT 2575
DB 1 CTCTCCAGACTTATATAGTCATCAT 25
|||||

RESULT 7
US-10-187-253A-38
; Sequence 38, Application US/10187253A
; Publication No. US20030170612A1
; GENERAL INFORMATION:
; APPLICANT: Pichuanes, Sergio
; APPLICANT: Shyamala, Venkatakrishna
; TITLE OF INVENTION: DIAGNOSTIC ASSAYS FOR PARVOVIRUS B19
; FILE REFERENCE: CHIR-17194/03US / PPI7194.004
; CURRENT APPLICATION NUMBER: US/10/187,253A
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 92
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 38
; LENGTH: 24
; TYPE: DNA
; ORGANISM: Artificial Sequence
```



```

; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: primer VP2-5
US-10-187-253A-38

Query Match          0.4%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 6.2;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4620 GACACGGATATGAAAGCCTGAAG 4643
Db 1 GACATGGATATGAAAGCCTGAAG 24

RESULT 8
US-09-802-110B-91
; Sequence 91, Application US/09802110B
; Publication No. US20030082535A1
; GENERAL INFORMATION:
; APPLICANT: Leushner, James
; Hui, May
; Dunn, James M.
; LaCroix, Jean-Michel
; TITLE OF INVENTION: METHOD, COMPOSITIONS AND KIT FOR
; DETECTION AND IDENTIFICATION OF MICROORGANISMS
; NUMBER OF SEQUENCES: 189
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Opedahl & Larson LLP
; STREET: PO Box 5068
; CITY: Dillon
; STATE: CO
; COUNTRY: US
; ZIP: 80435
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS DOS
; SOFTWARE: Word Perfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/802,110B
; FILING DATE: 07-Mar-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: <Unknown>
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Larson, Marina T.
; REGISTRATION NUMBER: 32,038
; REFERENCE/DOCKET NUMBER: VGEN.P-058-2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (970) 468-6600
; TELEFAX: (970) 468-0104
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 91:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; HYPOTHETICAL: no
; ANTI-SENSE: yes
; FRAGMENT TYPE: internal
; SEQUENCE DESCRIPTION: SEQ ID NO: 91:
US-09-802-110B-91

Query Match          0.4%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.8;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2429 GGAACAGACTTAGAGCTTATTC 2450
Db 1 GGAACAGACTTAGAGCTTATTC 22
```

```

RESULT 9
US-10-231-843-18
; Sequence 18, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GP132-02.U7
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 18
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-18

Query Match          0.4%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.8;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2585 CATGGACAGTTATCTGACCACC 2606
Db 1 CATGGACAGTTATCTGACCACC 22

RESULT 10
US-10-231-843-28
; Sequence 28, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GP132-02.U7
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 28
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-28

Query Match          0.4%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.8;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2660 GTATTATCTAGTGAAGACTTAC 2681
Db 1 GTATTATCTAGTGAAGACTTAC 22

RESULT 11
US-09-815-656-6
; Sequence 6, Application US/09815656
; Patent No. US20010041331A1
```

```

; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Leary, Thomas
; APPLICANT: Erker, James
; APPLICANT: Chalmers, Michelle
; APPLICANT: Simons, John
; APPLICANT: Birkenmeyer, Larry
; APPLICANT: Muerthoff, Scott
; APPLICANT: Pilot-Matias, Tami
; APPLICANT: Desai, Suresh
; APPLICANT: Mushanwar, Isa
; TITLE OF INVENTION: METHODS OF UTILIZING THE TT VIRUS
; FILE REFERENCE: 6461.US.01
; CURRENT APPLICATION NUMBER: US/09/815,656
; CURRENT FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: 09/245,248
; PRIOR FILING DATE: 1999-02-05
; NUMBER OF SEQ ID NOS: 71
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 23
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: primer bind
; LOCATION: (0)...(0)
; OTHER INFORMATION: B19-Reverse primer
; US-09-815-656-6

Query Match 0.4%; Score 21.4; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 7.2;
Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3015 GCATGACTTCAGTAACTCTGCA 3037
DB 1 GCATGACTTCAGTAACTCTGCA 23

RESULT 12
US-09-802-110B-92/c
; Sequence 92, Application US/09802110B
; Publication No. US20030082535A1
; GENERAL INFORMATION:
; APPLICANT: Leushner, James
; Hui, May
; Dunn, James M.
; LaCroix, Jean-Michel
; TITLE OF INVENTION: METHOD, COMPOSITIONS AND KIT FOR
; DETECTION AND IDENTIFICATION OF MICROORGANISMS
; NUMBER OF SEQUENCES: 189
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Opedahl & Larson LLP
; STREET: PO Box 5068
; CITY: Dillon
; STATE: CO
; COUNTRY: US
; ZIP: 80435
; MEDIUM TYPE: Diskette - 3.5 inch, 1.44 Mb storage
; COMPUTER: IBM compatible
; OPERATING SYSTEM: MS DOS
; SOFTWARE: Word Perfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/802,110B
; FILING DATE: 07-Mar-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: <Unknown>
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Larson, Marina T.
; REGISTRATION NUMBER: 32,038
; REFERENCE/DOCKET NUMBER: VGEN.P-058-2

```

```

; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (970) 468-6600
; TELEFAX: (970) 468-0104
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 92:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; HYPOTHETICAL: no
; ANTI-SENSE: no
; FRAGMENT TYPE: internal
; SEQUENCE DESCRIPTION: SEQ ID NO: 92:
US-09-802-110B-92

Query Match 0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.6;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2667 CTAGTGAAGACTTACACAGC 2687
DB 1 CTAGTGAAGACTTACACAGC 1

RESULT 13
US-10-231-843-30
; Sequence 30, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 30
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-30

Query Match 0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.6;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2667 CTAGTGAAGACTTACACAGC 2687
DB 1 CTAGTGAAGACTTACACAGC 21

RESULT 14
US-10-231-843-31
; Sequence 31, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30

```

```
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 31
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-31

Query Match          0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.6;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2670 GTGAACACTTACACAGCCTG 2690
Db 1 GTGAACACTTACACAGCCTG 21

RESULT 15
US-10-231-843-32
; Sequence 32, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GP132-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 32
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-32

Query Match          0.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.6;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2657 GCAGTATTATCTAGTGAAGAC 2677
Db 1 GCAGTATTATCTAGTGAAGAC 21

RESULT 16
US-09-815-656-10/c
; Sequence 10, Application US/09815656
; Patent No. US20010041331A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Leary, Thomas
; APPLICANT: Erker, James
; APPLICANT: Chalmers, Michelle
; APPLICANT: Simons, John
; APPLICANT: Birkenmeyer, Larry
; APPLICANT: Muerhoff, Scott
; APPLICANT: Pilot-Matias, Tami
; APPLICANT: Desai, Suresh
; APPLICANT: Mushahwar, Isa
; TITLE OF INVENTION: METHODS OF UTILIZING THE TT VIRUS
; FILE REFERENCE: 6461.US.O1
; CURRENT APPLICATION NUMBER: US/09/815,656
```

```
; CURRENT FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: 09/245,248
; PRIOR FILING DATE: 1999-02-05
; NUMBER OF SEQ ID NOS: 71
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: primer bind
; LOCATION: (0)...(0)
; OTHER INFORMATION: B19.2119-al primer
US-09-815-656-10

Query Match          0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1992 CGGAAGCCCGATTCTCTCG 2011
Db 20 CGGAAGCCCGATTCTCTCG 1

RESULT 17
US-10-231-843-27
; Sequence 27, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GP132-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 60/316,691
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 27
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-27

Query Match          0.4%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 11;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2583 GCCATGGACAGTTATCTGAC 2602
Db 1 GCCATGGACAGTTATCTGAC 20

RESULT 18
US-10-187-253A-37/c
; Sequence 37, Application US/10187253A
; Publication No. US20030170612A1
; GENERAL INFORMATION:
; APPLICANT: Pichuanes, Sergio
; APPLICANT: Shyamala, Venkatakrishna
; TITLE OF INVENTION: DIAGNOSTIC ASSAYS FOR PARVOVIRUS B19
; FILE REFERENCE: CHIR-17194/03US / PPI17194.004
; CURRENT APPLICATION NUMBER: US/10/187,253A
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 92
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 37
; LENGTH: 20
```

```

; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: primer VP-3
US-10-187-253A-37

Query Match          0.4%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 11;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3315 CACCATTAGAGTTTCAGCAC 3334
Db 20 CACCATTAGAGTTTCAGCAC 1
|||||

RESULT 19
US-10-231-843-39
; Sequence 39, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 39
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-39

Query Match          0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 9.8;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2670 GTGAAGACTTACACAGC 2687
Db 1 GTGAAGACTTACACAGC 18
|||||

RESULT 20
US-10-231-843-40
; Sequence 40, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 40
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-40

Query Match          0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 9.8;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2670 GTGAAGACTTACACAGC 2687
Db 1 GTGAAGACTTACACAGC 18
|||||

RESULT 20
US-10-231-843-40
; Sequence 40, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 40
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-40

Query Match          0.4%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 9.8;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2670 GTGAAGACTTACACAGC 2687
Db 1 GTGAAGACTTACACAGC 18
|||||

RESULT 21
US-10-187-253A-59/c
; Sequence 59, Application US/10187253A
; Publication No. US20030170612A1
; GENERAL INFORMATION:
; APPLICANT: Pichuanes, Sergio
; APPLICANT: Shyamala, Venkatakrishna
; TITLE OF INVENTION: DIAGNOSTIC ASSAYS FOR PARVOVIRUS B19
; FILE REFERENCE: CHIR-17194/03US / PP17194.004
; CURRENT APPLICATION NUMBER: US/10/187,253A
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 92
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 59
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: primer VSP2
US-10-187-253A-59

Query Match          0.3%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 12;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3316 ACCATTAGAGTTTCAGCAC 3334
Db 19 ACCATTAGAGTTTCAGCAC 1
|||||

RESULT 22
US-10-231-843-38
; Sequence 38, Application US/10231843
; Publication No. US20030124578A1
; GENERAL INFORMATION:
; APPLICANT: Brentano, Steven T.
; APPLICANT: Batranina-Kaminsky, Margarita
; APPLICANT: Hasselkus-Light, Cynthia S.
; APPLICANT: Kolk, Daniel P.
; TITLE OF INVENTION: Assay for detection of human parvovirus B19 nucleic acid
; FILE REFERENCE: GPI32-02.UT
; CURRENT APPLICATION NUMBER: US/10/231,843
; CURRENT FILING DATE: 2002-08-30
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 38
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic construct
US-10-231-843-38

Query Match          0.3%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 14;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2583 GCCATGACAGTTATCTG 2600
Db 1 GTCATGACAGTTATCTG 18
|||||
```

RESULT 23
 US-09-827-395A-840
 ; Sequence 840, Application US/09827395A
 ; Publication No. US20030113891A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Ribozyme Pharmaceuticals, Inc.
 ; APPLICANT: Lawrence Blatt
 ; APPLICANT: James McSwiggen
 ; APPLICANT: Bharat Chowhira
 ; APPLICANT: Peter Haerberli
 ; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G
 ; FILE REFERENCE: MEH800-878-C (400/017)
 ; CURRENT APPLICATION NUMBER: US/09/827,395A
 ; CURRENT FILING DATE: 2001-04-05
 ; PRIOR APPLICATION NUMBER: 09/780,533
 ; PRIOR FILING DATE: 2001-02-09
 ; PRIOR APPLICATION NUMBER: 60/181,797
 ; PRIOR FILING DATE: 2000-02-11
 ; NUMBER OF SEQ ID NOS: 2617
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 840
 ; LENGTH: 17
 ; TYPE: RNA
 ; ORGANISM: Homo sapiens
 US-09-827-395A-840

Query Match 0.3%; Score 16; DB 1; Length 17;
 Best Local Similarity 68.8%; Pred. No. 14;
 Matches 11; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 2767 TGCTGTGGACAGTGCT 2782
 :||:|||||:
 Db 1 UGCUGGACAGUCU 16

RESULT 24
 US-09-827-395A-1020
 ; Sequence 1020, Application US/09827395A
 ; Publication No. US20030113891A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Ribozyme Pharmaceuticals, Inc.
 ; APPLICANT: Lawrence Blatt
 ; APPLICANT: James McSwiggen
 ; APPLICANT: Bharat Chowhira
 ; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G
 ; FILE REFERENCE: MEH800-878-C (400/017)
 ; CURRENT APPLICATION NUMBER: US/09/827,395A
 ; CURRENT FILING DATE: 2001-04-05
 ; PRIOR APPLICATION NUMBER: 09/780,533
 ; PRIOR FILING DATE: 2001-02-09
 ; PRIOR APPLICATION NUMBER: 60/181,797
 ; PRIOR FILING DATE: 2000-02-11
 ; NUMBER OF SEQ ID NOS: 2617
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 1020
 ; LENGTH: 17
 ; TYPE: RNA
 ; ORGANISM: Homo sapiens
 US-09-827-395A-1020

Query Match 0.3%; Score 16; DB 1; Length 17;
 Best Local Similarity 68.8%; Pred. No. 14;
 Matches 11; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 2767 TGCTGTGGACAGTGCT 2782
 :||:|||||:
 Db 2 UGCUGGACAGUCU 17

RESULT 25
 US-10-430-882-840
 ; Sequence 840, Application US/10430882
 ; Publication No. US20030203870A1

; GENERAL INFORMATION:
 ; APPLICANT: Ribozyme Pharmaceuticals, Inc.
 ; APPLICANT: Lawrence Blatt
 ; APPLICANT: James McSwiggen
 ; APPLICANT: Bharat Chowhira
 ; APPLICANT: Peter Haerberli
 ; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G
 ; FILE REFERENCE: MEH800-878-H (400/112)
 ; CURRENT APPLICATION NUMBER: US/10/430,882
 ; CURRENT FILING DATE: 2003-05-06
 ; PRIOR APPLICATION NUMBER: 09/827,395
 ; PRIOR FILING DATE: 2001-04-05
 ; PRIOR APPLICATION NUMBER: 09/780,533
 ; PRIOR FILING DATE: 2001-02-09
 ; PRIOR APPLICATION NUMBER: PCT/US01/04273
 ; PRIOR FILING DATE: 2001-02-09
 ; PRIOR APPLICATION NUMBER: 60/181,797
 ; PRIOR FILING DATE: 2000-02-11
 ; PRIOR APPLICATION NUMBER: PCT/US02/10512
 ; PRIOR FILING DATE: 2002-04-03
 ; NUMBER OF SEQ ID NOS: 2617
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 840
 ; LENGTH: 17
 ; TYPE: RNA
 ; ORGANISM: Homo sapiens
 US-10-430-882-840

Query Match 0.3%; Score 16; DB 1; Length 17;
 Best Local Similarity 68.8%; Pred. No. 14;
 Matches 11; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 2767 TGCTGTGGACAGTGCT 2782
 :||:|||||:
 Db 1 UGCUGGACAGUCU 16

RESULT 26
 US-10-430-882-1020
 ; Sequence 1020, Application US/10430882
 ; Publication No. US20030203870A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Ribozyme Pharmaceuticals, Inc.
 ; APPLICANT: Lawrence Blatt
 ; APPLICANT: James McSwiggen
 ; APPLICANT: Bharat Chowhira
 ; APPLICANT: Peter Haerberli
 ; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G
 ; FILE REFERENCE: MEH800-878-H (400/112)
 ; CURRENT APPLICATION NUMBER: US/10/430,882
 ; CURRENT FILING DATE: 2003-05-06
 ; PRIOR APPLICATION NUMBER: 09/827,395
 ; PRIOR FILING DATE: 2001-04-05
 ; PRIOR APPLICATION NUMBER: 09/780,533
 ; PRIOR FILING DATE: 2001-02-09
 ; PRIOR APPLICATION NUMBER: PCT/US01/04273
 ; PRIOR FILING DATE: 2001-02-09
 ; PRIOR APPLICATION NUMBER: 60/181,797
 ; PRIOR FILING DATE: 2000-02-11
 ; PRIOR APPLICATION NUMBER: PCT/US02/10512
 ; PRIOR FILING DATE: 2002-04-03
 ; NUMBER OF SEQ ID NOS: 2617
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 1020
 ; LENGTH: 17
 ; TYPE: RNA
 ; ORGANISM: Homo sapiens
 US-10-430-882-1020

Query Match 0.3%; Score 16; DB 1; Length 17;
 Best Local Similarity 68.8%; Pred. No. 14;
 Matches 11; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 2767 TGCTGTGGACAGTGCT 2782
:|:|:|:|:|:|:|:|:|:|:
Db 2 UGCUGGACAGUGCU 17

Search completed: April 22, 2004, 06:36:29
Job time : 1 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 22, 2004, 06:38:30 ; Search time 0.001 Seconds
(without alignments)
1005.600 Million cell updates/sec

Title: us-09-555-640-1
Perfect score: 5028
Sequence: 1 gacgtcacggaatgacgt.....acgtatttcgtgacgtc 5028

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 0.5

Searched: 9 seqs, 100 residues

Total number of hits satisfying chosen parameters: 18

Minimum DB seq length: 10
Maximum DB seq length: 30

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 13 summaries

Database : rst.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	12	0.2	12	1	CF300273 ACCESSION:CF300273
2	12	0.2	12	1	CF331951 ACCESSION:CF331951
3	12	0.2	13	1	CF299938 ACCESSION:CF299938
C 4	10.4	0.2	13	1	CF299938 ACCESSION:CF299938
C 5	10	0.2	10	1	CF302524 ACCESSION:CF302524
C 6	10	0.2	11	1	CF299360 ACCESSION:CF299360
7	10	0.2	11	1	CF300559 ACCESSION:CF300559
8	10	0.2	11	1	CF543159 ACCESSION:CF543159
C 9	9.4	0.2	11	1	CF299360 ACCESSION:CF299360
C 10	9.4	0.2	12	1	CF300273 ACCESSION:CF300273
C 11	9.4	0.2	12	1	CF331951 ACCESSION:CF331951
C 12	9	0.2	10	1	CA795700 ACCESSION:CA795700
13	9	0.2	10	1	CF333615 ACCESSION:CF333615

ALIGNMENTS

RESULT 1
LOCUS CF300273 12 bp mRNA linear EST 15-AUG-2003
DEFINITION 7LEAF--04-J19.g1 Rice leaf plasmid cDNA library II (7LEAF) Oryza sativa cDNA clone 7LEAF--04-J19, mRNA sequence.
ACCESSION CF300273
VERSION CF300273.1 GI:33672034
KEYWORDS EST.
SOURCE Oryza sativa
ORGANISM Oryza sativa
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE 1 (bases 1 to 12)
AUTHORS Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C.,

Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.
Large-scale Sequencing Analysis of Rice ESTs
Unpublished (2003)
Contact: Nahm B.H.
Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, Myongji University
Yongin, Kyeonggi, Korea
Tel: 82 31 321 6193
Fax: 82 31 321 6355
Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.

FEATURES

source
1..12
Location/Qualifiers
/organism="Oryza sativa"
/mol_type="mRNA"
/cultivar="Nackdong"
/db_xref="taxon:4530"
/clone="7LEAF--04-J19"
/tissue_type="leaf"
/dev_stage="7 days after germination"
/lab_host="E.coli DH10B"
/clone_lib="Rice leaf plasmid cDNA library II (7LEAF)"
/notes="Vector: PCR4-TOPO; Site 1: EcoRI; mRNA was capped with oligoribonucleotides and then used as templates for RT-PCR."

Query Match 0.2%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.85;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2872 AAAAAATATATA 2883

Db 1 AAAAAATATATA 12

RESULT 2

LOCUS CF331951 12 bp mRNA linear EST 18-AUG-2003
DEFINITION NACL--08-E07.g1 Rice callus plasmid cDNA library (NACL) Oryza sativa cDNA clone NACL--08-E07, mRNA sequence.
ACCESSION CF331951 GI:33812123
VERSION CF331951.1
KEYWORDS Oryza sativa
SOURCE Oryza sativa
ORGANISM Oryza sativa
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE 1 (bases 1 to 12)
AUTHORS Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C., Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.
Large-scale Sequencing Analysis of Rice ESTs
Unpublished (2003)
Contact: Nahm B.H.
Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, Myongji University
Yongin, Kyeonggi, Korea
Tel: 82 31 321 6193
Fax: 82 31 321 6355
Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.

FEATURES

source
1..12
Location/Qualifiers
/organism="Oryza sativa"
/mol_type="mRNA"
/cultivar="Nackdong"
/db_xref="taxon:4530"
/clone="NACL--08-E07"
/tissue_type="callus"
/dev_stage="proliferated callus on 2N6 media for 30 days"
/lab_host="E.coli DH10B"
/clone_lib="Rice callus plasmid cDNA library (NACL)"
/notes="Vector: PCR4-TOPO; Site 1: EcoRI; mRNA was capped with oligoribonucleotides and then used as templates for RT-PCR."

Thu Apr 22 06:52:32 2004

```

AUTHORS      Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
              Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
TITLE        Large-scale Sequencing Analysis of Rice ESTs
JOURNAL      Unpublished (2003)
COMMENT      Contact: Nahm B.H.
              Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
              of Bioscience and Bioinformatics, Myongji University
              Yongin, Kyeonggi, Korea
              Tel: 82 31 330 6193
              Fax: 82 31 321 6355
              Email: bnhahm@gbio.com, bnhahm@bio.myongji.ac.kr.

FEATURES
  source
  1. .13
     /organism="Oryza sativa"
     /mol_type="mRNA"
     /cultivar="Nackdong"
     /db_xref="taxon:4530"
     /clone="7LEAF--04-C12"
     /tissue_type="leaf"
     /dev_stage="7 days after germination"
     /lab_host="E.coli DH10B"
     /clone_lib="Rice leaf plasmid cDNA library II (7LEAF)"
     /note="Vector: PCR4-TOPO; Site 1: EcoRI; mRNA was capped
     with oligoribonucleotides and then used as templates for
     RT-PCR."

Query Match      0.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 3.6;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 523 TTATACCTTTT 534
    |||||
Db 12 TTATATTTTTT 1

RESULT 5
CF302524/c      10 bp mRNA linear EST 15-AUG-2003
LOCUS           7LEAF--08-B22.g1 Rice leaf plasmid cDNA library II (7LEAF) Oryza
DEFINITION      sativa cDNA clone 7LEAF--08-B22, mRNA sequence.
ACCESSION       CF302524
VERSION         CF302524.1 GI:33674285
KEYWORDS        EST.
SOURCE          Oryza sativa
ORGANISM        Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
                Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
                Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE       1 (bases 1 to 10)
AUTHORS         Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
                Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
TITLE          Large-scale Sequencing Analysis of Rice ESTs
JOURNAL        Unpublished (2003)
COMMENT        Contact: Nahm B.H.
                Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
                of Bioscience and Bioinformatics, Myongji University
                Yongin, Kyeonggi, Korea
                Tel: 82 31 330 6193
                Fax: 82 31 321 6355
                Email: bnhahm@gbio.com, bnhahm@bio.myongji.ac.kr.

FEATURES
  source
  1. .10
     /organism="Oryza sativa"
     /mol_type="mRNA"
     /cultivar="Nackdong"
     /db_xref="taxon:4530"
     /clone="7LEAF--08-B22"
     /tissue_type="leaf"
     /dev_stage="7 days after germination"
     /lab_host="E.coli DH10B"
     /clone_lib="Rice leaf plasmid cDNA library II (7LEAF)"
     /note="Vector: PCR4-TOPO; Site 1: EcoRI; mRNA was capped
     with oligoribonucleotides and then used as templates for
     RT-PCR."

Query Match      0.2%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.78;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2872 AAAAAATATAAA 2883
    |||||
Db 2 AAAAAATATAAA 13

RESULT 4
CF299938/c      13 bp mRNA linear EST 15-AUG-2003
LOCUS           7LEAF--04-C12.g1 Rice leaf plasmid cDNA library II (7LEAF) Oryza
DEFINITION      sativa cDNA clone 7LEAF--04-C12, mRNA sequence.
ACCESSION       CF299938
VERSION         CF299938.1 GI:33671699
KEYWORDS        EST.
SOURCE          Oryza sativa
ORGANISM        Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
                Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
                Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE       1 (bases 1 to 13)

```



```

RT-PCR. "
Query Match      0.2%; Score 10; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 6;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 680 TTAATATTTT 689
Db 10 TTAATATTTT 1

RESULT 6
CF299360
LOCUS      11 bp mRNA linear EST 15-AUG-2003
DEFINITION 7LEAF--03-F15.g1 Rice leaf plasmid cDNA library II (7LEAF) Oryza
           sativa cDNA clone 7LEAF--03-F15, mRNA sequence.
ACCESSION  CF299360
VERSION     CF299360.1 GI:33671121
KEYWORDS   EST.
SOURCE     Oryza sativa
ORGANISM   Oryza sativa
           Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
           Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
           Ehrhartoideae; Oryzeae; Oryza.
REFERENCE  1 (bases 1 to 11)
AUTHORS   Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
           Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
TITLE     Large-scale Sequencing Analysis of Rice ESTs
JOURNAL   Unpublished (2003)
COMMENT   Contact: Nahm B.H.
           Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
           of Bioscience and Bioinformatics, Myongji University
           Yongin, Kyeonggi, Korea
           Tel: 82 31 330 6193
           Fax: 82 31 321 6355
           Email: bhnam@gbio.com, bhnam@bio.myongji.ac.kr.

FEATURES
           source
           1..11
           /organism="Oryza sativa"
           /mol_type="mRNA"
           /cultivar="Nackdong"
           /db_xref="taxon:4530"
           /clone="7LEAF--05-B09"
           /tissue_type="leaf"
           /dev_stage="7 days after germination"
           /lab_host="E.coli DH10B"
           /clone_lib="Rice leaf plasmid cDNA library II (7LEAF)"
           /note="Vector: pCR4-TOPO; Site 1: EcoRI; mRNA was capped
           with oligoribonucleotides and then used as templates for
           RT-PCR."

Query Match      0.2%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 6;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4879 AAAAAATAAAA 4888
Db 2 AAAAAATAAAA 11

RESULT 8
CF543159
LOCUS      11 bp mRNA linear EST 22-SEP-2003
DEFINITION S014678-024-030-006-SP6 MP1Z-ADIS-024-leaf Beta vulgaris cDNA clone
           024-030-006 5-PRIME, mRNA sequence.
ACCESSION  CF543159
VERSION     CF543159.1 GI:34891599
KEYWORDS   EST.
SOURCE     Beta vulgaris
ORGANISM   Beta vulgaris
           Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
           Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
           Caryophyllales; Amaranthaceae; Beta.
REFERENCE  1 (bases 1 to 11)
AUTHORS   Herwig,R., Schulz,B., Weisshaar,B., Hennig,S., Steinfath,M.,
           Drungowski,M., Stahl,D., Wruck,W., Menze,A., O'Brien,J., Lehrach,H.
           and Radelof,U.

TITLE     Construction of a 'unigene' cDNA clone set by oligonucleotide
           fingerprinting allows access to 25 000 potential sugar beet genes
JOURNAL   Plant J. 32 (5), 845-857 (2002)
MEDLINE   22362189
PUBMED    12472698
COMMENT   Contact: Weisshaar B
           ADIS DNA core facility at MP1Z
           Max-Planck-Institute for Plant Breeding Research
           Carl-von-Linne Weg 10, 50829 Koeln, Germany
           Fax: 00492215062851
           Email: weisshaar@piz-koeln.mpg.de
           Insert length: 11 Std Error: 0.00
           Plate: 30 row: 0 column: 06
           Seq primer: SP6.

FEATURES
           source
           1..11
           /organism="Beta vulgaris"
           /mol_type="mRNA"
           /cultivar="KWS2320 (double haploid, monogerm breeding
           line)"

```

/db_xref="GABI:936619"
 /db_xref="taxon:161934"
 /clone="024-030-006"
 /tissue_type="leaf"
 /lab_host="EMDH10B"
 /clone_lib="MP1Z-ADIS-024-leaf"
 /note="Vector: pCMVSPORT6; Site 1: Sali; Site 2: NotI;
 cDNA library from sugar beet, library provided by KWS
 Kleinwanzlebener Saatgut AG Einbeck, Germany, contact:
 b.schulz@kws.de; cloning sites Sali-NotI, primer sites and
 orientation:
 SP6-Sali-CCACGGCTCG-Sprime-cDNA-polyA-CC-NotI-T7; Note:
 Sequencing granted in the context of the GABI-Beet
 project, local PI: Dr. Katharina Schneider, coordinator:
 Prof. Christian Jung; Sequence submission managed by
 RZPD/GABI-Primary database:http://gabi.rzpd.de"

Query Match 0.2%; Score 10; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 6;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 234 ACACCTTCTT 243
 |||||
 Db 2 ACACCTTCTT 11

RESULT 9
 CF299360/c
 LOCUS 11 bp mRNA linear EST 15-AUG-2003
 DEFINITION 7LEAF--03-F15-g1 Rice leaf plasmid cDNA library II (7LEAF) Oryza
 sativa cDNA clone 7LEAF--03-F15, mRNA sequence.

ACCESSION CF299360
 VERSION CF299360.1 GI:33671121
 KEYWORDS EST.

SOURCE Oryza sativa
 ORGANISM Oryza sativa

REFERENCE Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
 Ehrhartoideae; Oryzaceae; Oryza.

1 (bases 1 to 11)

AUTHORS Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
 Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
 TITLE Large-scale Sequencing Analysis of Rice ESTs
 JOURNAL Unpublished (2003)
 COMMENT Contact: Nahm B.H.

Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
 of Bioscience and Bioinformatics, Myongji University
 Yongin, Kyeonggi, Korea
 Tel: 82 31 330 6193
 Fax: 82 31 321 6355
 Email: bhnahm@gbio.com, bhnahm@bio.myongji.ac.kr.

FEATURES Location/Qualifiers

1..11
 /organism="Oryza sativa"
 /mol_type="mRNA"
 /cultivar="Nackdong"
 /db_xref="taxon:4530"
 /clone="7LEAF--03-F15"
 /tissue_type="leaf"
 /dev_stage="7 days after germination"
 /lab_host="E.coli DH10B"
 /clone_lib="Rice leaf plasmid cDNA library II (7LEAF)"
 /note="Vector: pCR4-TOPO; Site 1: EcoRI; mRNA was capped
 with oligoribonucleotides and then used as templates for
 RT-PCR."

Query Match 0.2%; Score 9.4; DB 1; Length 11;
 Best Local Similarity 90.9%; Pred. No. 9;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 92 TTTTGAATT 102
 |||||
 Db 11 TTTTGAATT 1

RESULT 10
 CF300273/c

LOCUS 12 bp mRNA linear EST 15-AUG-2003
 DEFINITION 7LEAF--04-J19-g1 Rice leaf plasmid cDNA library II (7LEAF) Oryza
 sativa cDNA clone 7LEAF--04-J19, mRNA sequence.

ACCESSION CF300273
 VERSION CF300273.1 GI:33672034
 KEYWORDS EST.

SOURCE Oryza sativa

ORGANISM Oryza sativa
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
 Ehrhartoideae; Oryzaceae; Oryza.

1 (bases 1 to 12)

AUTHORS Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
 Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.

TITLE Large-scale Sequencing Analysis of Rice ESTs
 JOURNAL Unpublished (2003)
 COMMENT Contact: Nahm B.H.

Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
 of Bioscience and Bioinformatics, Myongji University
 Yongin, Kyeonggi, Korea
 Tel: 82 31 330 6193
 Fax: 82 31 321 6355
 Email: bhnahm@gbio.com, bhnahm@bio.myongji.ac.kr.

FEATURES Location/Qualifiers

1..12
 /organism="Oryza sativa"
 /mol_type="mRNA"
 /cultivar="Nackdong"
 /db_xref="taxon:4530"
 /clone="7LEAF--04-J19"
 /tissue_type="leaf"
 /dev_stage="7 days after germination"
 /lab_host="E.coli DH10B"
 /clone_lib="Rice leaf plasmid cDNA library II (7LEAF)"
 /note="Vector: pCR4-TOPO; Site 1: EcoRI; mRNA was capped
 with oligoribonucleotides and then used as templates for
 RT-PCR."

Query Match 0.2%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 8;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 523 TTATATTTTT 533
 |||||
 Db 11 TTATATTTTT 1

RESULT 11
 CF331951/c

LOCUS 12 bp mRNA linear EST 18-AUG-2003
 DEFINITION NACL--08-E07-g1 Rice callus plasmid cDNA library (NACL) Oryza
 sativa cDNA clone NACL--08-E07, mRNA sequence.

ACCESSION CF331951
 VERSION CF331951.1 GI:33812123
 KEYWORDS EST.

SOURCE Oryza sativa

ORGANISM Oryza sativa
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
 Ehrhartoideae; Oryzaceae; Oryza.

1 (bases 1 to 12)

AUTHORS Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
 Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.

TITLE Large-scale Sequencing Analysis of Rice ESTs
 JOURNAL Unpublished (2003)
 COMMENT Contact: Nahm B.H.

Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
 of Bioscience and Bioinformatics, Myongji University
 Yongin, Kyeonggi, Korea

Tel: 82 31 330 6193
 Fax: 82 31 321 6355
 Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.

FEATURES

Location/Qualifiers
 1..12
 /organism="Oryza sativa"
 /mol_type="mRNA"
 /cultivar="Nackdong"
 /db_xref="taxon:4530"
 /clone="NACL-08-E07"
 /tissue_type="callus"
 /dev_stage="proliferated callus on 2N6 media for 30 days"
 /lab_host="E.coli DH10B"
 /clone_lib="Rice callus plasmid cDNA library (NACL)"
 /note="Vector: pCR4-TOPO; Site 1: EcoRI; mRNA was capped with oligoribonucleotides and then used as templates for RT-PCR."

Query Match 0.2%; Score 9.4; DB 1; Length 12;
 Best Local Similarity 90.9%; Pred. No. 8.8;
 Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 149 TGTATATTTT 159

DB 11 TTTATATTTT 1

RESULT 12

CA795700/c
 LOCUS
 DEFINITION
 Theobroma cacao cDNA clone Cac_BL_2724 5', mRNA sequence.

ACCESSION
 CA795700

VERSION
 CA795700.1 GI:26052776

KEYWORDS
 EST.

SOURCE
 Theobroma cacao (cacao)

ORGANISM

Theobroma cacao
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
 rosids; eurosids II; Malvales; Malvaceae; Byttnerioideae;
 Theobroma.

1 (bases 1 to 10)

Jones, P.G., Allaway, D., Gilmour, D.M., Harris, C., Rankin, D.,

Retzel, E.R. and Jones, C.A.

Gene discovery and microarray analysis of cacao (Theobroma cacao

L.) varieties

Planta 216 (2), 255-264 (2002)

22337596

12447539

Masterfoods

3d Dundee Road, Slough, Berkshire, UK, SL1 4LG

Tel: +44 1664 416644

Email: Paul.Jones@eu.effem.com

Seq primer: T3.

FEATURES

source

Location/Qualifiers
 1..10
 /organism="Theobroma cacao"
 /mol_type="mRNA"
 /strain="Amelonado type"
 /db_xref="taxon:3641"
 /clone="Cac BL 2724"
 /tissue_type="Mature leaf and mature bean"
 /cell_type="whole organ"
 /dev_stage="maturity"
 /lab_host="XL-1 Blue MRF"
 /clone_lib="Cac_BL (Bean and Leaf from Amelonado type Cacao)"
 /note="Vector: pBK-CMV; Bean and leaf tissue from an Amelonado type Cacao tree."

Query Match 0.2%; Score 9; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 13;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 191 AGGGCGGA 199

DB 10 AGGGCGGA 2

RESULT 13

CF333615

LOCUS

DEFINITION

JMT--02-J09-gi ACJMT-overexpressing transgenic rice plasmid cDNA

library (JMT) Oryza sativa CDNA clone JMT--02-J09, mRNA sequence.

CF333615

ACCESSION

CF333615.1 GI:33815525

VERSION

EST.

KEYWORDS

SOURCE

Oryza sativa

ORGANISM

Oryza sativa

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;

Ehrhartoideae; Oryzaceae; Oryza.

1 (bases 1 to 10)

Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C.,

Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.

Large-scale Sequencing Analysis of Rice ESTs

Unpublished (2003)

Contact: Nahm B.H.

Genomics and Genetics Institute, GreenGene Biotech Inc.; Division

of Bioscience and Bioinformatics, Myongji University

Yongin, Kyeonggi, Korea

Tel: 82 31 330 6193

Fax: 82 31 321 6355

Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.

Location/Qualifiers

1..10

/organism="Oryza sativa"

/mol_type="mRNA"

/cultivar="Nackdong"

/db_xref="taxon:4530"

/clone="JMT--02-J09"

/tissue_type="leaf"

/dev_stage="14 days after germination"

/lab_host="E.coli DH10B"

/clone_lib="AtJMT-overexpressing transgenic rice plasmid

cDNA library (JMT)"

/note="Vector: pCR4-TOPO; Site 1: EcoRI; Oligo-capped mRNA

was reverse transcribed and then used for PCR. mRNA was

prepared from Arabidopsis Jasmonate Carboxyl

methyltransferase overexpression line."

Query Match

Best Local Similarity 100.0%; Pred. No. 13;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4036 GGACACTGA 4044

DB 1 GGACACTGA 9

Search completed: April 22, 2004, 06:38:31

Job time : 1 secs

THIS PAGE BLANK (USPTO)

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 20, 2004, 23:48:16 ; Search time 19804 Seconds
(without alignments)
11589.490 Million cell updates/sec

Title: US-09-555-640-1

Perfect score: 5028

Sequence: 1 gagctcacaggaatgacgt.....acgtatttcctgtgacgtc 5028

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 3470272 seqs, 21671516995 residues

Total number of hits satisfying chosen parameters: 6940544

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

GenEmbl.*

1: gb_ba.*

2: gb_htg.*

3: gb_in.*

4: gb_om.*

5: gb_ov.*

6: gb_pat.*

7: gb_ph.*

8: gb_pl.*

9: gb_pr.*

10: gb_ro.*

11: gb_sts.*

12: gb_sy.*

13: gb_un.*

14: gb_vi.*

15: em_ba.*

16: em_fun.*

17: em_hum.*

18: em_in.*

19: em_mu.*

20: em_om.*

21: em_or.*

22: em_ov.*

23: em_pat.*

24: em_ph.*

25: em_pl.*

26: em_ro.*

27: em_sts.*

28: em_un.*

29: em_vi.*

30: em_htg_hum.*

31: em_htg_inv.*

32: em_htg_other.*

33: em_htg_mus.*

34: em_htg_pln.*

35: em_htg_rod.*

36: em_htg_mam.*

37: em_htg_vrt.*

38: em_sy.*

39: em_htgo_hum.*

40: em_htgo_mus.*

41: em_htgo_other.*

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	DB	ID	Description
1	5028	100.0	5028	6	AX003421	Sequence
2	5028	100.0	5028	6	BD087037	Erythrovi
3	5028	100.0	5028	14	HER249437	Human ery
4	4587.4	91.2	4844	14	AY083234	B19 virus
5	4119.2	81.9	4844	14	AY064475	Erythrovi
6	4117.6	81.9	4844	14	AY064476	Erythrovi
7	3941.8	78.4	4612	14	AY044266	B19 virus
8	3888.4	77.3	5156	14	PVB19NSVP	Z68146 Parvovirus
9	3875.6	77.1	5596	14	AY386330	B19 virus
10	3864.4	76.9	5594	14	AF162273	Erythrovi
11	3858.4	76.7	5255	14	AF162273	Erythrovi
12	3839.8	76.4	5112	14	PVBPAU	M24682 Human parvo
13	3729	74.2	4803	14	AB030694	Erythrovi
14	3714.6	73.9	4803	14	AB030693	Erythrovi
15	3632.6	72.2	4631	14	PVB19X560	AB030694 Erythrovi
16	3629.4	72.2	4677	6	E09420	Z70560 Parvovirus
17	3621.2	72.0	4578	14	PVB19X528	E09420 Nucleotide
18	3605.2	71.7	4628	14	AB030673	Erythrovi
19	3600.4	71.6	4538	14	AF113323	Erythrovi
20	3573.8	71.1	4513	14	AY028237	B19 virus
21	3571.8	71.0	4514	14	PVB19X599	Erythrovi
22	3552	70.6	4466	14	AB126265	Z70599 Parvovirus
23	3550.4	70.6	4474	14	AB126270	AB126265 B19 virus
24	3544	70.5	4466	14	AB126262	AB126270 B19 virus
25	3542.4	70.5	4466	14	AB126263	AB126262 B19 virus
26	3542.4	70.5	4466	14	AB126264	AB126263 B19 virus
27	3539.2	70.4	4466	14	AB126266	AB126264 B19 virus
28	3536	70.3	4466	14	AB126269	AB126266 B19 virus
29	3531.2	70.2	4466	14	AB126267	AB126271 B19 virus
30	3528	70.2	4466	14	AB126268	AB126267 B19 virus
31	3528	70.2	4466	14	AB126268	AB126268 B19 virus
32	3420	68.0	4279	14	AF161226	AB126268 B19 virus
33	3397.6	67.6	4268	14	AF161225	AF161226 Erythrovi
34	3385.6	67.3	4265	14	AF161224	AF161225 Erythrovi
35	3377.2	67.2	4265	14	AF161223	AF161224 Erythrovi
36	3010.2	59.9	3737	14	AY028241	AY028241 B19 virus
37	2343	46.6	2343	6	AX003505	AX003505 Sequence
38	2343	46.6	2343	6	BD087119	BD087119 Erythrovi
39	2280.8	45.4	2805	14	AY028225	AY028225 B19 virus
40	2218.8	44.1	2630	14	AY044268	AY044268 B19 virus
41	2013	40.0	2013	6	AX003501	AX003501 Sequence
42	2013	40.0	2013	6	BD087117	BD087117 Erythrovi
43	1960	39.0	2537	14	AY028255	AY028255 B19 virus
44	1942.8	38.6	2450	14	AY028234	AY028234 B19 virus
45	1914	38.1	2346	14	EBU38509	U38509 Erythrovi

ALIGNMENTS

RESULT 1	AX003421	Sequence 1	5028 bp	DNA	linear	PAT 07-SBP-2000
LOCUS	AX003421	Sequence 1	from Patent WO9928439.			
DEFINITION	AX003421					
ACCESSION	AX003421					
VERSION	AX003421.1	GI:9927225				
KEYWORDS						
SOURCE						
ORGANISM						
		B19 virus				
		B19 virus				
		Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.				
REFERENCE		1				
AUTHORS		Auguste, V., Garbarg-Chenon, A. and Nguyen, Q.T.				
TITLE		Erythrovirus and its applications				
JOURNAL		Patent: WO 9928439-A 1 10-JUN-1999;				
		ASSIST PUBL HOPITAUX DE PARIS (FR); AUGUSTE VERONIQUE (FR); GARBARG				

CHENON ANTOINE (FR); NGUYEN QUANG TRI (FR)
FEATURES
Location/Qualifiers
1..5028
/organism="B19 virus"
/mol_type="unassigned DNA"
/db_xref="taxon:10798"

ORIGIN

Query Match 100.0%; Score 5028; DB 6; Length 5028;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5028; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GAGCTCACAGGAAATGACGTAACCTGTCGGCCATCTTGACCGGAAGTCCCGCTACCGGC 60
DB 1 GAGCTCACAGGAAATGACGTAACCTGTCGGCCATCTTGACCGGAAGTCCCGCTACCGGC 60
QY 61 GCGACCGGGCGGATCGATTTGGTGCTCTTTTGGAAATTTGGGGGCTTTTCCCG 120
DB 61 GCGACCGGGCGGATCGATTTGGTGCTCTTTTGGAAATTTGGGGGCTTTTCCCG 120
QY 121 CCTTATGCAATTAAGCGGCATGTTAAATGTTATATTTAAATTTAAATTTGACAAACGCCT 180
DB 121 CCTTATGCAATTAAGCGGCATGTTAAATGTTATATTTAAATTTAAATTTGACAAACGCCT 180
QY 181 AACGGTTACTAGGGCGGAGTTACGGCGGTATATAAGCAGCTGCGTTCCTCGACACTTT 240
DB 181 AACGGTTACTAGGGCGGAGTTACGGCGGTATATAAGCAGCTGCGTTCCTCGACACTTT 240
QY 241 CTTTCTGTTGCTTTTGACTGAACTCAGTCTGCTGCTCTTTGCTGCTTAAGTAACAGGT 300
DB 241 CTTTCTGTTGCTTTTGACTGAACTCAGTCTGCTGCTCTTTGCTGCTTAAGTAACAGGT 300
QY 301 ATTATATACTAACTTTAAATTAATACTAGGAGCTATTTTCGGGGTCTTTGACACTTTCC 360
DB 301 ATTATATACTAACTTTAAATTAATACTAGGAGCTATTTTCGGGGTCTTTGACACTTTCC 360
QY 361 TCTAACATTTCTGACTGTGCTAATGATTAATGCTGCTCTATGCTAGACTTAGATATCT 420
DB 361 TCTAACATTTCTGACTGTGCTAATGATTAATGCTGCTCTATGCTAGACTTAGATATCT 420
QY 421 TCTGACTGGGAACCACTAACCCATCTTAACAGATTAATGGCAATATTTAAGCAGTGT 480
DB 421 TCTGACTGGGAACCACTAACCCATCTTAACAGATTAATGGCAATATTTAAGCAGTGT 480
QY 481 GCTTCTAAACTTGATTTTACTGGGGCGGCTAGCAGGTTGCTTATCTTTTTCAGGTG 540
DB 481 GCTTCTAAACTTGATTTTACTGGGGCGGCTAGCAGGTTGCTTATCTTTTTCAGGTG 540
QY 541 GAATGTACAAATTTGAGGAAGGCTATCATATCCATGTAGTTATTTGGTGTCCAGGACTA 600
DB 541 GAATGTACAAATTTGAGGAAGGCTATCATATCCATGTAGTTATTTGGTGTCCAGGACTA 600
QY 601 AATGTGTAGAACTTAATCTGTGCGGTAGAGGTTATTTAAATGTTCTTTTACCATCTT 660
DB 601 AATGTGTAGAACTTAATCTGTGCGGTAGAGGTTATTTAAATGTTCTTTTACCATCTT 660
QY 661 GTAACGTGAAGTGTAAACTTAAATTTTTCAGGGATGACTACCAAGGAAATATTTT 720
DB 661 GTAACGTGAAGTGTAAACTTAAATTTTTCAGGGATGACTACCAAGGAAATATTTT 720
QY 721 AGAGATGGAGACAGTTTATAGAAATTTACTTAATGAATAATTTCCCTTAAATGTTGTG 780
DB 721 AGAGATGGAGACAGTTTATAGAAATTTACTTAATGAATAATTTCCCTTAAATGTTGTG 780
QY 781 TGGTGTGAACAAATTTGACGGGTATATAGACCTGTATTTCCGCTCTTTTCGGGGA 840
DB 781 TGGTGTGAACAAATTTGACGGGTATATAGACCTGTATTTCCGCTCTTTTCGGGGA 840
QY 841 GGAGCTTGTATGCTTAAAGACCCCGCATTTACTGCAATAACAGACAGTCTACTAATGAA 900
DB 841 GGAGCTTGTATGCTTAAAGACCCCGCATTTACTGCAATAACAGACAGTCTACTAATGAA 900
QY 901 ACTGGGGAGCTAGCTGTGGGGGGGAGATGTTGTGCCATTCGCTGGGAAGGAAACAAA 960

DB 901 ACTGGGGAGCTAGCTGTGGAGGGGAGATGTTGTGCCATTCGCTGGAAAGGAAACAAA 960
QY 961 GGGGGTTAAAGTTTCAAAACCATGTTAAATTTGGCTATGTGAAAAACAGAGTATTTACTGAA 1020
DB 961 GGGGGTTAAAGTTTCAAAACCATGTTAAATTTGGCTATGTGAAAAACAGAGTATTTACTGAA 1020
QY 1021 GATTAATGGAATTTAGTGGATTTTAAACCAATATATCTTTAATTAAGTAGCAGTACAGTGGC 1080
DB 1021 GATTAATGGAATTTAGTGGATTTTAAACCAATATATCTTTAATTAAGTAGCAGTACAGTGGC 1080
QY 1081 AGCTTTCAAATTTCAAAGTGCCTTTAAAGTTAGCTATTTATAAAGCTACTAACTTAGTACC 1140
DB 1081 AGCTTTCAAATTTCAAAGTGCCTTTAAAGTTAGCTATTTATAAAGCTACTAACTTAGTACC 1140
QY 1141 ACTAGTACATTTCTGTTTACATTTAGCAGCTTTGACAGGTTTACTTGCATTTAAAGAAATAAA 1200
DB 1141 ACTAGTACATTTCTGTTTACATTTAGCAGCTTTGACAGGTTTACTTGCATTTAAAGAAATAAA 1200
QY 1201 ATAGTAAATTTATTTATTTGTCAAAACTATGATCTCTTTTAGTGGGTCAACATGTGTTA 1260
DB 1201 ATAGTAAATTTATTTATTTGTCAAAACTATGATCTCTTTTAGTGGGTCAACATGTGTTA 1260
QY 1261 AGGTGCAATTTGACAAAAAATGTTGTAACAAAAACACCCCTGTTTACGGGCCACCAAGT 1320
DB 1261 AGGTGCAATTTGACAAAAAATGTTGTAACAAAAACACCCCTGTTTACGGGCCACCAAGT 1320
QY 1321 ACTGAAAAACAAATTTGGCAATGCTATGCTAAAACTGTACCAAGTGTATGGAATGGTG 1380
DB 1321 ACTGAAAAACAAATTTGGCAATGCTATGCTAAAACTGTACCAAGTGTATGGAATGGTG 1380
QY 1381 AATTGGAAATGAAAACTTTTCCATTTAATGATGTAGCGGGGAAAAAGTTTGGTGTCTGG 1440
DB 1381 AATTGGAAATGAAAACTTTTCCATTTAATGATGTAGCGGGGAAAAAGTTTGGTGTCTGG 1440
QY 1441 GATGAAGCAATTTAAGTCCATTTAGTGAAGCTGCAAAAGCCATTTTAAAGTGTCTCG 1500
DB 1441 GATGAAGCAATTTAAGTCCATTTAGTGAAGCTGCAAAAGCCATTTTAAAGTGTCTCG 1500
QY 1501 CCAACAGGTTAGATCAGAAAAATGCTGGCAGTGTGGCAGTGTGGCGGTGCTGTGGTT 1560
DB 1501 CCAACAGGTTAGATCAGAAAAATGCTGGCAGTGTGGCAGTGTGGCGGTGCTGTGGTT 1560
QY 1561 ATAACAGCAATGTGTGACATTTTCTGTGAGTGTATATCCACTACACTGTGAT 1620
DB 1561 ATAACAGCAATGTGTGACATTTTCTGTGAGTGTATATCCACTACACTGTGAT 1620
QY 1621 GCTAAAGCCTTTAAAGGAAACCGATGTTAAAGCTAAACCTTTACCAATAGATGTAGCCCTGAC 1680
DB 1621 GCTAAAGCCTTTAAAGGAAACCGATGTTAAAGCTAAACCTTTACCAATAGATGTAGCCCTGAC 1680
QY 1681 ATGGGTTTACTTACAGAGGCTGATACAAATGGCTTAATCTGTTGTTAATGCAAAAGC 1740
DB 1681 ATGGGTTTACTTACAGAGGCTGATACAAATGGCTTAATCTGTTGTTAATGCAAAAGC 1740
QY 1741 TGGAGCCACTATGAAAACTGGGCAATTAACCTACATTTGATTTCCCTGGAAATTAATGCA 1800
DB 1741 TGGAGCCACTATGAAAACTGGGCAATTAACCTACATTTGATTTCCCTGGAAATTAATGCA 1800
QY 1801 GATGCCCTCCACCAGATCTCCAAACCAACCCCACTTGTCCAGACACAGTATCAGCAGC 1860
DB 1801 GATGCCCTCCACCAGATCTCCAAACCAACCCCACTTGTCCAGACACAGTATCAGCAGC 1860
QY 1861 AGTGGTGTGAAGCTCTGAAGAACTCAGTGAAGAGCTTTTCAACCTCATCCTCCCA 1920
DB 1861 AGTGGTGTGAAGCTCTGAAGAACTCAGTGAAGAGCTTTTCAACCTCATCCTCCCA 1920
QY 1921 GGGCCTGGAAACAGTGAACCCCGCTCTAGTACGCCCTTCCCGGGGACAGTTCAGGA 1980
DB 1921 GGGCCTGGAAACAGTGAACCCCGCTCTAGTACGCCCTTCCCGGGGACAGTTCAGGA 1980
QY 1981 GATCATTTCTCGGAAGCCAGTTTCTCTCGAAGTGTAGCCCGCTGTGGGAGGAAGCT 2040

Db 1981 GAATCATTTTGTGGAGCCCGAGTTTCTCCGAAGTGGTAGCCGGTCTGGGAGGAGCT 2040
Qy 2041 TTTTACAGCGCGTGGCGATCAGTTTTCGTGAACCTGTTAGTAGGGGTGACTTTGTATGG 2100
Db 2041 TTTTACAGCGCGTGGCGATCAGTTTTCGTGAACCTGTTAGTAGGGGTGACTTTGTATGG 2100
Qy 2101 GATGGTGTAGGGGATTCCTGTTTCTGCTGTGTGGAACATATAAACAACAGTGGGGAGGG 2160
Db 2101 GATGGTGTAGGGGATTCCTGTTTCTGCTGTGTGGAACATATAAACAACAGTGGGGAGGG 2160
Qy 2161 TTGGGGCTTTGCCCTCATTTGATTAATGTGGGAGCTTGGTATATATGATGGAATTTAGA 2220
Db 2161 TTGGGGCTTTGCCCTCATTTGATTAATGTGGGAGCTTGGTATATATGATGGAATTTAGA 2220
Qy 2221 GAGTTTACTCCAGACTTTAGTGGCTGCGATGTCAGTTGTAGAGCCCTCTAACCCATTTCCT 2280
Db 2221 GAGTTTACTCCAGACTTTAGTGGCTGCGATGTCAGTTGTAGAGCCCTCTAACCCATTTCCT 2280
Qy 2281 GTGTTAACTTGTAAAAATGTCTTACCTGTCTGGATTACAAAGTTTGTAGATTATGAG 2340
Db 2281 GTGTTAACTTGTAAAAATGTCTTACCTGTCTGGATTACAAAGTTTGTAGATTATGAG 2340
Qy 2341 TAAAAACACTAACAAATGGTGGAAAGCAGTGACAAATTTGCCAGAGCGTGTATAGCA 2400
Db 2341 TAAAAACACTAACAAATGGTGGAAAGCAGTGACAAATTTGCCAGAGCGTGTATAGCA 2400
Qy 2401 GTTTGTGCAATTTTATGAAAAAGCTACTCGAAACAGACTTAGAGCTTATCAAAATTTTAA 2460
Db 2401 GTTTGTGCAATTTTATGAAAAAGCTACTCGAAACAGACTTAGAGCTTATCAAAATTTTAA 2460
Qy 2461 AGACCAATTACAAATTTCTTTAGATAATCTTTTGAAGAACCCCTCTTTTATTTGACTT 2520
Db 2461 AGACCAATTACAAATTTCTTTAGATAATCTTTTGAAGAACCCCTCTTTTATTTGACTT 2520
Qy 2521 AGTTGCTCGCATTTAAAGTAATCTTAAACCTCTCCAGACCTATATAGTATCATTTTCA 2580
Db 2521 AGTTGCTCGCATTTAAAGTAATCTTAAACCTCTCCAGACCTATATAGTATCATTTTCA 2580
Qy 2581 GAGCCATGACAGTTATCTGACCACCCCTATGCTTATCATCCAGTAAACAGTAGTGACA 2640
Db 2581 GAGCCATGACAGTTATCTGACCACCCCTATGCTTATCATCCAGTAAACAGTAGTGACA 2640
Qy 2641 ACCTAGAGGAAATGACAGTATTTCTAGTGAAGACTTACAAAGCTGGGCAAGTTAG 2700
Db 2641 ACCTAGAGGAAATGACAGTATTTCTAGTGAAGACTTACAAAGCTGGGCAAGTTAG 2700
Qy 2701 CATACAATTTACCGGTACTAATCTATGTTGGCTGCGCAATGAGCTACAGCTGGGCTCC 2760
Db 2701 CATACAATTTACCGGTACTAATCTATGTTGGCTGCGCAATGAGCTACAGCTGGGCTCC 2760
Qy 2761 GCAGAATGCTGTGGACAGTCTGCAAGGATTCATGACTTTAGGTATAGCCAAATTTGGCTAA 2820
Db 2761 GCAGAATGCTGTGGACAGTCTGCAAGGATTCATGACTTTAGGTATAGCCAAATTTGGCTAA 2820
Qy 2821 GTTGGGAATAAATCCTTTATACATTTGACCGGTAGCAGATGAAGAATTTGTAATAAATAT 2880
Db 2821 GTTGGGAATAAATCCTTTATACATTTGACCGGTAGCAGATGAAGAATTTGTAATAAATAT 2880
Qy 2881 AAAAAATGAACAGGTTTCAAGCACAAGCAGTAAAGATTACTTTTAAAGGTGC 2940
Db 2881 AAAAAATGAACAGGTTTCAAGCACAAGCAGTAAAGATTACTTTTAAAGGTGC 2940
Qy 2941 AGCTGCCCTGTGGCCCATTTTCAAGGAAGTTTACCGGAAGTGGCCGCTACAAAGCTTC 3000
Db 2941 AGCTGCCCTGTGGCCCATTTTCAAGGAAGTTTACCGGAAGTGGCCGCTACAAAGCTTC 3000
Qy 3001 AGAAAAATACCCAGCATGACTTTCAGTTAACTCTGCAAGAGCCAGCACTGGTCCAGCGG 3060
Db 3001 AGAAAAATACCCAGCATGACTTTCAGTTAACTCTGCAAGAGCCAGCACTGGTCCAGCGG 3060
Qy 3061 GGGAGGTAGCAACCCCTACAAAAAGCATGTGGAGTGAAGGGGCTACATTTTACTGCTAATTC 3120
Db 3061 GGGAGGTAGCAACCCCTACAAAAAGCATGTGGAGTGAAGGGGCTACATTTTACTGCTAATTC 3120

Qy 3121 TGTAAAGCTGTACATTTCTTAGGCAATTTTAAATTCATATGATCCAGAGCATCATTTATAA 3180
Db 3121 TGTAAAGCTGTACATTTCTTAGGCAATTTTAAATTCATATGATCCAGAGCATCATTTATAA 3180
Qy 3181 AGTGTCTCTCCAGCAGCTAGTAGTGCACAAATGCTAGTGGGAAAGGCAAAAGTGTG 3240
Db 3181 AGTGTCTCTCCAGCAGCTAGTAGTGCACAAATGCTAGTGGGAAAGGCAAAAGTGTG 3240
Qy 3241 CACTATTAGTCCCAATTTATGGGGTACTCTACTCCGTGGAGATCTTAGATTTTAAATGCTTT 3300
Db 3241 CACTATTAGTCCCAATTTATGGGGTACTCTACTCCGTGGAGATCTTAGATTTTAAATGCTTT 3300
Qy 3301 AAATTTGTTTTTCTCCAAATTAGAGTTTCAGCACTTAAATTTGAAAAATTTAGTAGTAGC 3360
Db 3301 AAATTTGTTTTTCTCCAAATTAGAGTTTCAGCACTTAAATTTGAAAAATTTAGTAGTAGC 3360
Qy 3361 TCCAGATGCTTTAACTGTAACTATTTTCAGAAATTCGTGTAAAGATGTCCACAGACAAAC 3420
Db 3361 TCCAGATGCTTTAACTGTAACTATTTTCAGAAATTCGTGTAAAGATGTCCACAGACAAAC 3420
Qy 3421 AGGAGGAGTGTGCAAGTTACTGACAGCACACAGGACCGTTTGTGTATGTTAGTGGATCA 3480
Db 3421 AGGAGGAGTGTGCAAGTTACTGACAGCACACAGGACCGTTTGTGTATGTTAGTGGATCA 3480
Qy 3481 TGAGTATAAATACCCATATGCTAGGTGAGGACAAAGACACACTAGTCCAGAACTGCC 3540
Db 3481 TGAGTATAAATACCCATATGCTAGGTGAGGACAAAGACACACTAGTCCAGAACTGCC 3540
Qy 3541 CATTTGGGTTTACTTTCCCTCCAGTATGCTTACTTAAACAGTAGTGAAGTAAACACACA 3600
Db 3541 CATTTGGGTTTACTTTCCCTCCAGTATGCTTACTTAAACAGTAGTGAAGTAAACACACA 3600
Qy 3601 AGGAATTTTCAGGAGACAGCAAAAAATTTGGCTAGTGAAGAAATCAGCTTTTATGTGTAGA 3660
Db 3601 AGGAATTTTCAGGAGACAGCAAAAAATTTGGCTAGTGAAGAAATCAGCTTTTATGTGTAGA 3660
Qy 3661 GCACAGTTTCATTTGAACTTTTGGGTACAGGGGGATCTGCCACTATGCTCTCAAAATTTCC 3720
Db 3661 GCACAGTTTCATTTGAACTTTTGGGTACAGGGGGATCTGCCACTATGCTCTCAAAATTTCC 3720
Qy 3721 AGCTGTGCCCCCAGAAACCTAGAGGCTGACAGCCAAATTTTATGAATGTACAAACC 3780
Db 3721 AGCTGTGCCCCCAGAAACCTAGAGGCTGACAGCCAAATTTTATGAATGTACAAACC 3780
Qy 3781 TTTGTACGGTCTCTCGTTTAGGGTACTTCACACATTAGGAGGGAGCCCTAAATTTAGATC 3840
Db 3781 TTTGTACGGTCTCTCGTTTAGGGGTACTTCACACATTAGGAGGGAGCCCTAAATTTAGATC 3840
Qy 3841 ATTGACACAGGAAGACCCAGCAATTCAGCCACAAATCTTTATGCTGGGCCACTAATAA 3900
Db 3841 ATTGACACAGGAAGACCCAGCAATTCAGCCACAAATCTTTATGCTGGGCCACTAATAA 3900
Qy 3901 TTCAGTGTCTCAAAAGAGGAGACAATTTCTAATACAGTGTCTGGAAGAGCCCTTACGGG 3960
Db 3901 TTCAGTGTCTCAAAAGAGGAGACAATTTCTAATACAGTGTCTGGAAGAGCCCTTACGGG 3960
Qy 3961 GCTTAGTACTGGCACTAGCCAAACACACAGAAATTTCCCTACGCCCGGCCAGTATCTCA 4020
Db 3961 GCTTAGTACTGGCACTAGCCAAACACACAGAAATTTCCCTACGCCCGGCCAGTATCTCA 4020
Qy 4021 GCCATACCATCTCTGGGACACTGATAAATATGTTACAGGAATAAATGCCATTTTCAATGG 4080
Db 4021 GCCATACCATCTCTGGGACACTGATAAATATGTTACAGGAATAAATGCCATTTTCAATGG 4080
Qy 4081 ACAACCACTTATGAAGATGTGAGGACAAAGAGTATCAAGAGGGGTAGGAGATTTC 4140
Db 4081 ACAACCACTTATGAAGATGTGAGGACAAAGAGTATCAAGAGGGGTAGGAGATTTC 4140
Qy 4141 AAATGAAGAAGACAGCTTAAAGCAGTTTAAAGCTTCTTAACATGCAACACATCTTCCCTAA 4200
Db 4141 AAATGAAGAAGACAGCTTAAAGCAGTTTAAAGCTTCTTAACATGCAACACATCTTCCCTAA 4200

Db 721 AGAGATGGAGAGCAGTTTATAGAAAATTAATGAAAAAATTCCTTTAAATGTTGTG 780
QY 781 TGGTGTGTAACAAATATGACGGGTATATAGACACCTGTATTTCCGCTCTTTTCGGCGA 840
Db 781 TGGTGTGTAACAAATATGACGGGTATATAGACACCTGTATTTCCGCTCTTTTCGGCGA 840
QY 841 GGAGCTTGTCATGCTAAAAGACCCCGCATTAATGCAAAATACAGACAGTGTCTAATAGAA 900
Db 841 GGAGCTTGTCATGCTAAAAGACCCCGCATTAATGCAAAATACAGACAGTGTCTAATAGAA 900
QY 901 ACTGGGGAGTCTAGCTGTGGAGGGGAGATGTTGTGCCATTCCTCGGAAGGGAACAAA 960
Db 901 ACTGGGGAGTCTAGCTGTGGAGGGGAGATGTTGTGCCATTCCTCGGAAGGGAACAAA 960
QY 961 GCGGGGTAAAAGTTTCAAAACATATGCTATGTGAAACAGAGTATTTACTGAA 1020
Db 961 GCGGGGTAAAAGTTTCAAAACATATGCTATGTGAAACAGAGTATTTACTGAA 1020
QY 1021 GATAAATGGAAATAGTGGATTTTAAACCAATATACCTTTAATAGTAGCAGTCAAGTGC 1080
Db 1021 GATAAATGGAAATAGTGGATTTTAAACCAATATACCTTTAATAGTAGCAGTCAAGTGC 1080
QY 1081 AGCTTTCAAAATTCAGAGTGCCTTAAAGTTAGCTATTTAATAAGCTACTAATAGTACC 1140
Db 1081 AGCTTTCAAAATTCAGAGTGCCTTAAAGTTAGCTATTTAATAAGCTACTAATAGTACC 1140
QY 1141 ACTAGTACATTCCTGTGTACATTCAGACTTTGAGCAGTTACTTTGCAATTAAGAAATAA 1200
Db 1141 ACTAGTACATTCCTGTGTACATTCAGACTTTGAGCAGTTACTTTGCAATTAAGAAATAA 1200
QY 1201 ATAGTAAAATTAATATGTTGTCAAACTATGATCCTCTTTAGTGGGTCAACATGTGTTA 1260
Db 1201 ATAGTAAAATTAATATGTTGTCAAACTATGATCCTCTTTAGTGGGTCAACATGTGTTA 1260
QY 1261 AGTGTGATTCAGAAAATTCGTTAAABAAAACACCTGTGTTTACCGGCCACCAAGT 1320
Db 1261 AGTGTGATTCAGAAAATTCGTTAAABAAAACACCTGTGTTTACCGGCCACCAAGT 1320
QY 1321 ACTGGAATAAATTTGGCAATGGCTATGCTTAAACCTGTACAGTGTATGGAATGGTG 1380
Db 1321 ACTGGAATAAATTTGGCAATGGCTATGCTTAAACCTGTACAGTGTATGGAATGGTG 1380
QY 1381 AATTGGAATAAGAAATTTCCATTTAATGATGTAGCGGGGAAAAGTTTGGTGTCTGG 1440
Db 1381 AATTGGAATAAGAAATTTCCATTTAATGATGTAGCGGGGAAAAGTTTGGTGTCTGG 1440
QY 1441 GATGAAGGCATTAATGAGTCACTATGTGGAAGCTGCAAAAGCCATTTTGTAGTGTGCTAG 1500
Db 1441 GATGAAGGCATTAATGAGTCACTATGTGGAAGCTGCAAAAGCCATTTTGTAGTGTGCTAG 1500
QY 1501 CCAACAGGGTAGATCAGAAAATGCGTGGCAGTGTGGCAGTGCCTGTGCTGTGGTT 1560
Db 1501 CCAACAGGGTAGATCAGAAAATGCGTGGCAGTGTGGCAGTGCCTGTGCTGTGGTT 1560
QY 1561 ATAAACAGCAATGGTGACATTAATTTGTTGTGAGTGGTAAATACCACTACAACTGTGCAT 1620
Db 1561 ATAAACAGCAATGGTGACATTAATTTGTTGTGAGTGGTAAATACCACTACAACTGTGCAT 1620
QY 1621 GCTAAAGCCTTAAAGCAAGGATGTAAGCTAACTTTTACCAATAGATGTAGCCCTGAC 1680
Db 1621 GCTAAAGCCTTAAAGCAAGGATGTAAGCTAACTTTTACCAATAGATGTAGCCCTGAC 1680
QY 1681 ATGGGTTTACTTACAGAGGCTGATGTACAAATATGGCTACTTGGTGTATATGCAAAAGC 1740
Db 1681 ATGGGTTTACTTACAGAGGCTGATGTACAAATATGGCTACTTGGTGTATATGCAAAAGC 1740
QY 1741 TGGAGCCACTATGAAAATCTGGCAATTAACATACATTTGATTTCCCTGGAAATAATGCA 1800
Db 1741 TGGAGCCACTATGAAAATCTGGCAATTAACATACATTTGATTTCCCTGGAAATAATGCA 1800
QY 1801 GATGCCCTCCACCAGATCTCCAAACCAACCCCATTTGTGCCAGACACCAAGTATCAGCAGC 1860
Db 1801 GATGCCCTCCACCAGATCTCCAAACCAACCCCATTTGTGCCAGACACCAAGTATCAGCAGC 1860

QY 1861 AGTGTGTGTGAAGCTCTGAAGAACTCAGTGAAGCAGCTTTTCAACCTCATCTCCA 1920
Db 1861 AGTGTGTGTGAAGCTCTGAAGAACTCAGTGAAGCAGCTTTTCAACCTCATCTCCA 1920
QY 1921 GCGGCTGTGAACAGTGAACCCCGGCTCTAGTACGCCCGTCCCGGACAGTTCAGGA 1980
Db 1921 GCGGCTGTGAACAGTGAACCCCGGCTCTAGTACGCCCGTCCCGGACAGTTCAGGA 1980
QY 1981 GAATCATTTGTGCGAAGCCAGTTCCTCCGAAGTGTAGCGCGTCTGCGGAGGAAGCT 2040
Db 1981 GAATCATTTGTGCGAAGCCAGTTCCTCCGAAGTGTAGCGCGTCTGCGGAGGAAGCT 2040
QY 2041 TTTTACACCCGCTTTCGCGATCAGTTTCGTGAACCTGTTAGTAGGGGTTGACTTTGTATGG 2100
Db 2041 TTTTACACCCGCTTTCGCGATCAGTTTCGTGAACCTGTTAGTAGGGGTTGACTTTGTATGG 2100
QY 2101 GATGTGTGAGGGGATTCCTGTTGCTGTGTGGAAATATAAACAACAGTGGGGAGGG 2160
Db 2101 GATGTGTGAGGGGATTCCTGTTGCTGTGTGGAAATATAAACAACAGTGGGGAGGG 2160
QY 2161 TTGGGCTTTGGCCTCATTTGATTAATGTGGAGCTTGGTATAATGGATGGAAATTTAGA 2220
Db 2161 TTGGGCTTTGGCCTCATTTGATTAATGTGGAGCTTGGTATAATGGATGGAAATTTAGA 2220
QY 2221 GAGTTTACTCCAGACTTAGTGGCTGCGAGTTGTCTATGTAGGAGCCTCTAACCCATTTTCT 2280
Db 2221 GAGTTTACTCCAGACTTAGTGGCTGCGAGTTGTCTATGTAGGAGCCTCTAACCCATTTTCT 2280
QY 2281 GTGTTAACTTTGAAAAATGTCTTACCTGTCTGGATTAACAAAGTTTGTAGATTTAG 2340
Db 2281 GTGTTAACTTTGAAAAATGTCTTACCTGTCTGGATTAACAAAGTTTGTAGATTTAG 2340
QY 2341 TAAACCACTAAACAATGTGGGAAGCAGTGAACAAATTTGCCAGACCTGTATTAAGCA 2400
Db 2341 TAAACCACTAAACAATGTGGGAAGCAGTGAACAAATTTGCCAGACCTGTATTAAGCA 2400
QY 2401 GTTGTGCAATTTTATGAAAAAGCTACTGGAACAGACTTAGAGCTTTATTTCAATTTTAA 2460
Db 2401 GTTGTGCAATTTTATGAAAAAGCTACTGGAACAGACTTAGAGCTTTATTTCAATTTTAA 2460
QY 2461 AGACCAATTAACAATTTCTTTAGATTAATCTTTAGAAAACCCCTCTTTTATTTGACTT 2520
Db 2461 AGACCAATTAACAATTTCTTTAGATTAATCTTTAGAAAACCCCTCTTTTATTTGACTT 2520
QY 2521 AGTTGCTCGCATTTAAAGTAATCTTAAACCTCTCCAGACCTATATAGTCAATTTTCA 2580
Db 2521 AGTTGCTCGCATTTAAAGTAATCTTAAACCTCTCCAGACCTATATAGTCAATTTTCA 2580
QY 2581 GAGCCATGGACAGTTATCTGACCAACCCCATGCTTATCATCCAGTAAACAGTAGTCAGA 2640
Db 2581 GAGCCATGGACAGTTATCTGACCAACCCCATGCTTATCATCCAGTAAACAGTAGTCAGA 2640
QY 2641 ACCTAGAGAGAAAATGCAAGTATATCTAGTGAAGCTTACACAGCCCTGGGCAAGTTAG 2700
Db 2641 ACCTAGAGAGAAAATGCAAGTATATCTAGTGAAGCTTACACAGCCCTGGGCAAGTTAG 2700
QY 2701 CATACAAATTTACCGGTAATCTATGTTGGGCTGGCAATGAGTACAGCTGGGCTGCC 2760
Db 2701 CATACAAATTTACCGGTAATCTATGTTGGGCTGGCAATGAGTACAGCTGGGCTGCC 2760
QY 2761 GCAGAAATGCTGTGGAAGTCTGCAAGGATTCATGACTTTAGGTATAGCAATTTGGCTAA 2820
Db 2761 GCAGAAATGCTGTGGAAGTCTGCAAGGATTCATGACTTTAGGTATAGCAATTTGGCTAA 2820
QY 2821 GTTGGGAATTAATCTTTATACACATTTGAGCGGTAGCAGATGAAGATTTGTTAAAAATAT 2880
Db 2821 GTTGGGAATTAATCTTTATACACATTTGAGCGGTAGCAGATGAAGATTTGTTAAAAATAT 2880
QY 2881 AAAAAATGAACAGGGTTTCAAGCAACAGCAGTAAAGATTTACTTTTAAAGGTGC 2940
Db 2881 AAAAAATGAACAGGGTTTCAAGCAACAGCAGTAAAGATTTACTTTTAAAGGTGC 2940

QY 2941 AGCTGCCCTGTGGCCCAATTTTCAAGGAAGTTTACCGGAAGTGC CGCGGTACAACGCCTC 3000
DB |||||
QY 2941 AGCTGCCCTGTGGCCCAATTTTCAAGGAAGTTTACCGGAAGTGC CGCGGTACAACGCCTC 3000
DB |||||
QY 3001 AGAAATATCCCCAGCATGACTTCAGTTAACTCTGAGAAAGCCAGCACTGTGTCAGGCGG 3060
DB |||||
QY 3001 AGAAATATCCCCAGCATGACTTCAGTTAACTCTGAGAAAGCCAGCACTGTGTCAGGCGG 3060
DB |||||
QY 3061 GGGAGGTAGCAACCCCTACAAAAGAGTGTGAGTGAAGGGCTACATTTACTGTCTAATTC 3120
DB |||||
QY 3061 GGGAGGTAGCAACCCCTACAAAAGAGTGTGAGTGAAGGGCTACATTTACTGTCTAATTC 3120
DB |||||
QY 3121 TGTAACTGTACATTTCTAGGCAATTTTAAATCCATATGTCAGAGCATCAATTATAA 3180
DB |||||
QY 3121 TGTAACTGTACATTTCTAGGCAATTTTAAATCCATATGTCAGAGCATCAATTATAA 3180
DB |||||
QY 3181 AGTGTCTCTCCAGAGCTAGTAGTGCACAACTGCTAGTGGAAAGGCAAAAGTGTG 3240
DB |||||
QY 3181 AGTGTCTCTCCAGAGCTAGTAGTGCACAACTGCTAGTGGAAAGGCAAAAGTGTG 3240
DB |||||
QY 3241 CACTATTTAGTCCATTTATGGGTACTCTACTCCGTGGAGATACCTTAAATTTAGTGTAGC 3300
DB |||||
QY 3241 CACTATTTAGTCCATTTATGGGTACTCTACTCCGTGGAGATACCTTAAATTTAGTGT 3300
DB |||||
QY 3301 AAATTTGTTTTCTCACCATTAGAGTTTCAGCACTTAATTTGAAAATTTATGTAGTATGC 3360
DB |||||
QY 3301 AAATTTGTTTTCTCACCATTAGAGTTTCAGCACTTAATTTGAAAATTTATGTAGTATGC 3360
DB |||||
QY 3361 TCCAGATGCTTTAACTGTAACTATTTTCAAGAAATTTGCTTAAAGATGTCACAGCAAAAC 3420
DB |||||
QY 3361 TCCAGATGCTTTAACTGTAACTATTTTCAAGAAATTTGCTTAAAGATGTCACAGCAAAAC 3420
DB |||||
QY 3421 AGGAGGAGTGTGCAAGTTACTGACAGCAACAGGACGTTTGTGTATGTAGTGATCA 3480
DB |||||
QY 3421 AGGAGGAGTGTGCAAGTTACTGACAGCAACAGGACGTTTGTGTATGTAGTGATCA 3480
DB |||||
QY 3481 TGAGTATAAATPACCATATGTCTAGGTACAGGACAGACACACTAGCTCCAGAACTGCC 3540
DB |||||
QY 3481 TGAGTATAAATPACCATATGTCTAGGTACAGGACAGACACACTAGCTCCAGAACTGCC 3540
DB |||||
QY 3541 CATTTGGGTTTACTTTTCCCGCCAGATGTCTTAACTAGAGTGAAGTAAACACACA 3600
DB |||||
QY 3541 CATTTGGGTTTACTTTTCCCGCCAGATGTCTTAACTAGAGTGAAGTAAACACACA 3600
DB |||||
QY 3601 AGGAATTTACGAGACAGCAAAAATTTGGCTAGTGAAGATCAGCTTTTATGTGTAGA 3660
DB |||||
QY 3601 AGGAATTTACGAGACAGCAAAAATTTGGCTAGTGAAGATCAGCTTTTATGTGTAGA 3660
DB |||||
QY 3661 GCACAGTTCAATTTGAACCTTTTGGGTAACGGGGATCTGCCACTATGTCTCAAAATTTCC 3720
DB |||||
QY 3661 GCACAGTTCAATTTGAACCTTTTGGGTAACGGGGATCTGCCACTATGTCTCAAAATTTCC 3720
DB |||||
QY 3721 AGCTGTGCCCCCAAGAAACCTTAGAGGCTGCAGCCCAACATTTTATGAAATGTACAACC 3780
DB |||||
QY 3721 AGCTGTGCCCCCAAGAAACCTTAGAGGCTGCAGCCCAACATTTTATGAAATGTACAACC 3780
DB |||||
QY 3781 TTGTACGGTCTCTGTTTGGGTAACCTGACACATTTAGGAGGGACCCCTAAATTTAGATC 3840
DB |||||
QY 3781 TTGTACGGTCTCTGTTTGGGTAACCTGACACATTTAGGAGGGACCCCTAAATTTAGATC 3840
DB |||||
QY 3841 ATTGACACAGGAACACCACTTACGCCCAAACTTTTATGCTGGGCCACTTAATAA 3900
DB |||||
QY 3841 ATTGACACAGGAACACCACTTACGCCCAAACTTTTATGCTGGGCCACTTAATAA 3900
DB |||||
QY 3901 TTCAGTGTCTCAAAAGAGGAGACAATTTCTAATACAGGTCTCGAAAAGCCCTTACGGG 3960
DB |||||
QY 3901 TTCAGTGTCTCAAAAGAGGAGACAATTTCTAATACAGGTCTCGAAAAGCCCTTACGGG 3960
DB |||||
QY 3961 GCTTAGTACTGSCACTAGCAAAACACCAATTTCCCTACGCCCGGGCCAGTATCTCA 4020
DB |||||
QY 3961 GCTTAGTACTGSCACTAGCAAAACACCAATTTCCCTACGCCCGGGCCAGTATCTCA 4020
DB |||||
QY 4021 GCCATACCATCTGGGACACTGATAAATATGTTTACAGGAATAATGCCATTTTACATGG 4080

DB |||||
QY 4021 GCCATACCATCTGGGACACTGATAAATATGTTACAGGAATAAATGCCATTTTACATGG 4080
DB |||||
QY 4081 ACAAACCACTTATGGAATGCTGAGCAAAAAGATATCAGCAAGGGGTAGGAAGATTTC 4140
DB |||||
QY 4081 ACAAACCACTTATGGAATGCTGAGCAAAAAGATATCAGCAAGGGGTAGGAAGATTTC 4140
DB |||||
QY 4141 AAATGAAAAGAACACGCTTAAAGCAGTTTCAAGAGTCTTAACATGCACACATCTCCCTAA 4200
DB |||||
QY 4141 AAATGAAAAGAACACGCTTAAAGCAGTTTCAAGAGTCTTAACATGCACACATCTCCCTAA 4200
DB |||||
QY 4201 TAAAGGAACCCAACTCAATATACACAGCAAAATTCGAAAGCCCTCTTATGGTGGGCTCTGTTG 4260
DB |||||
QY 4201 TAAAGGAACCCAACTCAATATACACAGCAAAATTCGAAAGCCCTCTTATGGTGGGCTCTGTTG 4260
DB |||||
QY 4261 GAACAGAGAGCTCTTCACTATGAAAGTCACTGTGGAGTAAATCCCTAACTTAGATGA 4320
DB |||||
QY 4261 GAACAGAGAGCTCTTCACTATGAAAGTCACTGTGGAGTAAATCCCTAACTTAGATGA 4320
DB |||||
QY 4321 CAGTTTAAACTCAATTTGAGCCCTTAGGGGGTGGGGTTTGCATCAACCAACCCCTCA 4380
DB |||||
QY 4321 CAGTTTAAACTCAATTTGAGCCCTTAGGGGGTGGGGTTTGCATCAACCAACCCCTCA 4380
DB |||||
QY 4381 AATATTTTAAATACTTACCAAAAAGTGGGCCAAATTTGGAGGTATTAATCCATGSGAAT 4440
DB |||||
QY 4381 AATATTTTAAATACTTACCAAAAAGTGGGCCAAATTTGGAGGTATTAATCCATGSGAAT 4440
DB |||||
QY 4441 TACTACTTTAGTTTCAATATGCTGTGGGAATAATCACAAGTTTACCATGACCTTTAAATTTGGG 4500
DB |||||
QY 4441 TACTACTTTAGTTTCAATATGCTGTGGGAATAATCACAAGTTTACCATGACCTTTAAATTTGGG 4500
DB |||||
QY 4501 ACCTCGAAGGCTACTGGAAGGTGGAATCCCAAGCTGGCGTTTATCCTCTCATGCGC 4560
DB |||||
QY 4501 ACCTCGAAGGCTACTGGAAGGTGGAATCCCAAGCTGGCGTTTATCCTCTCATGCGC 4560
DB |||||
QY 4561 TGGTCATTTTACCATATGCTACTGTATGACCCCAAGCTTACAGATGCAAGCAACACACAG 4620
DB |||||
QY 4561 TGGTCATTTTACCATATGCTACTGTATGACCCCAAGCTTACAGATGCAAGCAACACACAG 4620
DB |||||
QY 4621 ACACGGATATGAAAAGCTGGAAGTGTGGAATCTGCAAAAGCCGTGTGACCCCATTTGTA 4680
DB |||||
QY 4621 ACACGGATATGAAAAGCTGGAAGTGTGGAATCTGCAAAAGCCGTGTGACCCCATTTGTA 4680
DB |||||
QY 4681 AACATTTCCCAACCGTGTCTCAGCCAGGACCGTCAACCCCAACCGCCACCTGTGCCGCCCA 4740
DB |||||
QY 4681 AACATTTCCCAACCGTGTCTCAGCCAGGACCGTCAACCCCAACCGCCACCTGTGCCGCCCA 4740
DB |||||
QY 4741 GATTATATGTGCCCCCTTCCAAATACCCCGTAGGCAACCATCTATAAAGATACAGACGCTG 4800
DB |||||
QY 4741 GATTATATGTGCCCCCTTCCAAATACCCCGTAGGCAACCATCTATAAAGATACAGACGCTG 4800
DB |||||
QY 4801 TAGAATATAAATTAATTAATAGATATGAACACATGTAAATAGATGCTAAGATTATGTA 4860
DB |||||
QY 4801 TAGAATATAAATTAATTAATAGATATGAACACATGTAAATAGATGCTAAGATTATGTA 4860
DB |||||
QY 4861 ATATGTACACAAGTTTGGAAAAATAAAGCCTTAAATAAATTAATTAATGATGTATGTTTC 4920
DB |||||
QY 4861 ATATGTACACAAGTTTGGAAAAATAAAGCCTTAAATAAATTAATTAATGATGTATGTTTC 4920
DB |||||
QY 4921 TTTAAAAATTTTCAAAAAGAGCACCAATCAGATGCGCGCGGTGCGCGCGGTAGGCGG 4980
DB |||||
QY 4921 TTTAAAAATTTTCAAAAAGAGCACCAATCAGATGCGCGCGGTGCGCGCGGTAGGCGG 4980
DB |||||
QY 4981 GACTTCCCGGTACAGATGGCGACAGTTTACGTCATTTTCTGTGACGTC 5028
DB |||||
QY 4981 GACTTCCCGGTACAGATGGCGACAGTTTACGTCATTTTCTGTGACGTC 5028

RESULT 3

HER249437

LOCUS

DEFINITION

Human erythrovirus V9, NS1, VP1, VP2, 7.5-KDa, X, 11-KDa genes.

ACCESSION

AJ249437

HER249437 5028 bp DNA linear VRL 30-SEP-2001
Human erythrovirus V9, NS1, VP1, VP2, 7.5-KDa, X, 11-KDa genes.
AJ249437

[illegible]

Db	1201	ATAGTAAAAATTATTATTGTGTGTCAAAACTATGATCCTCTTTTAGTGGGTCAACATGTGTTA	1261
Qy	1261	AGGTGGATTGTACAAAAATGTGTAAAAAAACACCCCTGTGGTTTTACGGGGCACCAAGT	1320
Db	1261	AGGTGGATTGTACAAAAATGTGTAAAAAAACACCCCTGTGGTTTTACGGGGCACCAAGT	1320
Qy	1321	ACTGGAAAAACAAATTTTGGCAATGGCTATTGTCTAAAACTGTACAGTGTATGGAATGGTG	1380
Db	1321	ACTGGAAAAACAAATTTTGGCAATGGCTATTGTCTAAAACTGTACAGTGTATGGAATGGTG	1380
Qy	1381	AAATTGGAAATATGAACACTTTCCATTTAATGATGTAGCGGGAAAAAGTTTGGTGTCTGG	1440
Db	1381	AAATTGGAAATATGAACACTTTCCATTTAATGATGTAGCGGGAAAAAGTTTGGTGTCTGG	1440
Qy	1441	GATGAAGGCATTATTAAAGTCACACTATTGTGTGGAAGCTGCAAAAGCCATTTTATAGTGGTGCAG	1500
Db	1441	GATGAAGGCATTATTAAAGTCACACTATTGTGTGGAAGCTGCAAAAGCCATTTTATAGTGGTGCAG	1500
Qy	1501	CCAACCCAGGTAGATCAGAAAAATGCGTGGCAGTGTGGCAGTGCCTCCGGTGTGCTGTGGTT	1560
Db	1501	CCAACCCAGGTAGATCAGAAAAATGCGTGGCAGTGTGGCAGTGCCTCCGGTGTGCTGTGGTT	1560
Qy	1561	ATAACCCAGCAATGGTGCACATTACATTTTGTGTGAGTGTGTAATACCACTACCACTGTGTCAT	1620
Db	1561	ATAACCCAGCAATGGTGCACATTACATTTTGTGTGAGTGTGTAATACCACTACCACTGTGTCAT	1620
Qy	1621	GCTAAAGCCTTAAAGAACCGATGGTAAAGCTAAACTTTTACCATAAGATGATGCCCTGAC	1680
Db	1621	GCTAAAGCCTTAAAGAACCGATGGTAAAGCTAAACTTTTACCATAAGATGATGCCCTGAC	1680
Qy	1681	ATGGGTTTTACTTACAGAGGCTGATGTACACAAATGCTAACTTGGTGTGTAATGCACAAAGC	1740
Db	1681	ATGGGTTTTACTTACAGAGGCTGATGTACACAAATGCTAACTTGGTGTGTAATGCACAAAGC	1740
Qy	1741	TGGAGCCACTATGAAACTCGGCAATAAACTACACATTTTGATTTCCCTGGAATAAATGCA	1800
Db	1741	TGGAGCCACTATGAAACTCGGCAATAAACTACACATTTTGATTTCCCTGGAATAAATGCA	1800
Qy	1801	GATGCCCTCCACCAGATCTCCAAACACCCCATTTGTCCAGACACAGTATCAGCAGC	1860
Db	1801	GATGCCCTCCACCAGATCTCCAAACACCCCATTTGTCCAGACACACAGTATCAGCAGC	1860
Qy	1861	AGTGGTGGTGAAGCTCTGAAGAACTCAGTGAAGCAGCTTTTTCAACCTCATCACTCCA	1920
Db	1861	AGTGGTGGTGAAGCTCTGAAGAACTCAGTGAAGCAGCTTTTTCAACCTCATCACTCCA	1920
Qy	1921	GGCGCTGGAACTGTAAGAAACCCCGCGTCTAGTACCGCGTCCCGGGACAGTTCAGGA	1980
Db	1921	GGCGCTGGAACTGTAAGAAACCCCGCGTCTAGTACCGCGTCCCGGGACAGTTCAGGA	1980
Qy	1981	GAATCATTTTGTGGAAGCCAGTTTCTCCGAAGTGTAGCCCGCTGTGGGAGGAAGCT	2040
Db	1981	GAATCATTTTGTGGAAGCCAGTTTCTCCGAAGTGTAGCCCGCTGTGGGAGGAAGCT	2040
Qy	2041	TTTTACAGCGGCTTGCAGATCAGTTTCTGTGAACTCTGTTAGTAGGGGTTGACTTTGTATGG	2100
Db	2041	TTTTACAGCGGCTTGCAGATCAGTTTCTGTGAACTCTGTTAGTAGGGGTTGACTTTGTATGG	2100
Qy	2101	GATGCTGTGAGGGATTGGCTGTTTCTGTGTGGAACATATAAAACACAGTGGGGAGGG	2160
Db	2101	GATGCTGTGAGGGATTGGCTGTTTCTGTGTGGAACATATAAAACACAGTGGGGAGGG	2160
Qy	2161	TTGGGGCTTTGCCCTCATTTGATTAATATGTGGGAGCTTGGTATAATGGATGGAAATTTAGA	2220
Db	2161	TTGGGGCTTTGCCCTCATTTGATTAATATGTGGGAGCTTGGTATAATGGATGGAAATTTAGA	2220
Qy	2221	GAGTTTACTCCACACTTAGTGGCTCAGTTGTCTATGTAGGAGCCTCTAAACCATTTTCT	2280
Db	2221	GAGTTTACTCCACACTTAGTGGCTCAGTTGTCTATGTAGGAGCCTCTAAACCATTTTCT	2280
Qy	2281	GTGTTAACTGTAAAAAATGTGCTTACTCTGTCTGGATTAACAAAGTTTTGTAGATTAG	2340
Db	2281	GTGTTAACTGTAAAAAATGTGCTTACTCTGTCTGGATTAACAAAGTTTTGTAGATTAG	2340

QY	2341	TAAAAACACTTAA	CAAAATGGTGGAAAGCAGTGA	CAAAATTTGCCAGGACGTGTATAAGCA	2400
DB	2341	TAAAAACACTTAA	CAAAATGGTGGAAAGCAGTGA	CAAAATTTGCCAGGACGTGTATAAGCA	2400
QY	2401	GTTTGTGCAATTTT	TATGAAAGACTACTGGAACAGACTTATTC	CAAAATTTTAA	2460
DB	2401	GTTTGTGCAATTTT	TATGAAAGACTACTGGAACAGACTTATTC	CAAAATTTTAA	2460
QY	2461	AGACCAATTAACA	CAATTTCTTTAGATAATCTTTT	TAGAAAACCCCTCTCTTTTATTTGACTT	2520
DB	2461	AGACCAATTAACA	CAATTTCTTTAGATAATCTTTT	TAGAAAACCCCTCTCTTTTATTTGACTT	2520
QY	2521	AGTTGCTCGCAAT	TAAAGTAATCTTAA	AAACTCTCCAGACCTATATAGTCATCATTTTCA	2580
DB	2521	AGTTGCTCGCAAT	TAAAGTAATCTTAA	AAACTCTCCAGACCTATATAGTCATCATTTTCA	2580
QY	2581	GAGCCATGACAGT	TATCTGACACCCCAATGCTTAT	CTCAGTAACAGTAGTGCAGA	2640
DB	2581	GAGCCATGACAGT	TATCTGACACCCCAATGCTTAT	CTCAGTAACAGTAGTGCAGA	2640
QY	2641	ACCTAGAGGAAAT	AGCAATTTATCTAGTGAAGACTT	TACAAAGCCTGGGCAAGTTAG	2700
DB	2641	ACCTAGAGGAAAT	AGCAATTTATCTAGTGAAGACTT	TACAAAGCCTGGGCAAGTTAG	2700
QY	2701	CATACAAATTAAC	CCGGTACTAATCTATGTTGGGCT	TGGCAATGAGCTGAGCTGCTCC	2760
DB	2701	CATACAAATTAAC	CCGGTACTAATCTATGTTGGGCT	TGGCAATGAGCTGAGCTGCTCC	2760
QY	2761	GCAGATGCTGGCA	GCAGTCTGCAAGGATTCATGACTT	TAGTATAGCCAAATTTGGCTAA	2820
DB	2761	GCAGATGCTGGCA	GCAGTCTGCAAGGATTCATGACTT	TAGTATAGCCAAATTTGGCTAA	2820
QY	2821	GTGGCAATTAAT	CTTTATACATTTGACGAGTACGAGAT	TGTTAAATAAT	2880
DB	2821	GTGGCAATTAAT	CTTTATACATTTGACGAGTACGAGAT	TGTTAAATAAT	2880
QY	2881	AAAAAATGAACA	AGGTTTCAAGCACAGCAGTAAAGAT	TACTTTTAAAGGTGC	2940
DB	2881	AAAAAATGAACA	AGGTTTCAAGCACAGCAGTAAAGAT	TACTTTTAAAGGTGC	2940
QY	2941	AGTGGCCCTGTG	CCCAATTTCAAGGATTTACCGAAGT	TGCCCGCTGTAACGCGCTC	3000
DB	2941	AGTGGCCCTGTG	CCCAATTTCAAGGATTTACCGAAGT	TGCCCGCTGTAACGCGCTC	3000
QY	3001	AGAAAATACCC	CAGCATGACTTCACTTACGAGAGC	CAGCAGTGGTGCAGCGG	3060
DB	3001	AGAAAATACCC	CAGCATGACTTCACTTACGAGAGC	CAGCAGTGGTGCAGCGG	3060
QY	3061	GGGAGGTAGCA	ACCCTACAAAAAGCATGTGGAGT	GAAGGGCTACATTTCTCTAATTC	3120
DB	3061	GGGAGGTAGCA	ACCCTACAAAAAGCATGTGGAGT	GAAGGGCTACATTTCTCTAATTC	3120
QY	3121	TGTAAAGTGTAC	ATTTCTTAGGCAATTTTAA	TTCATATGATCCAGAGCATCATTTAA	3180
DB	3121	TGTAAAGTGTAC	ATTTCTTAGGCAATTTTAA	TTCATATGATCCAGAGCATCATTTAA	3180
QY	3181	AGTGTCTCTCA	GACGCTAGTGCACCAATGCTAGT	GGGAAAGGCAAGGTG	3240
DB	3181	AGTGTCTCTCA	GACGCTAGTGCACCAATGCTAGT	GGGAAAGGCAAGGTG	3240
QY	3241	CACATATAGTCC	CAATTTATGGGTACTCTACTCCG	TGGAGATCTTAGATTTTAAATGCTTT	3300
DB	3241	CACATATAGTCC	CAATTTATGGGTACTCTACTCCG	TGGAGATCTTAGATTTTAAATGCTTT	3300
QY	3301	AAATTTGTTTTCT	CAACATAGAGTTTACGCTTAA	TGAAAAATATAGTATAGC	3360
DB	3301	AAATTTGTTTTCT	CAACATAGAGTTTACGCTTAA	TGAAAAATATAGTATAGC	3360
QY	3361	TCCAGATGCTTAA	CTGTAATTTTCAAGAAATGCTG	TAAAGATGTACACACAAAC	3420
DB	3361	TCCAGATGCTTAA	CTGTAATTTTCAAGAAATGCTG	TAAAGATGTACACACAAAC	3420

QY	3421	AGAGGAGGTGTG	CAAGTTACTGACAGCACCA	CAGACGCTTTGTGTATGTTAGTGATCA	3480
DB	3421	AGAGGAGGTGTG	CAAGTTACTGACAGCACCA	CAGACGCTTTGTGTATGTTAGTGATCA	3480
QY	3481	TGAGTATAAATAC	CCATATGCTAGTCTAGGCA	GAAGACACACTAGCTCCAGAACTGCC	3540
DB	3481	TGAGTATAAATAC	CCATATGCTAGTCTAGGCA	GAAGACACACTAGCTCCAGAACTGCC	3540
QY	3541	CATTTGGGTTTAC	TTTCCCTCCAGTATGCTTTAA	CAGTAGGTGAAGTAAACACACA	3600
DB	3541	CATTTGGGTTTAC	TTTCCCTCCAGTATGCTTTAA	CAGTAGGTGAAGTAAACACACA	3600
QY	3601	AGAAATTTAGGAG	CAGCAAAAAATTTGCTAGT	GAAGAAATCAGCTTTTATGTGTAGA	3660
DB	3601	AGAAATTTAGGAG	CAGCAAAAAATTTGCTAGT	GAAGAAATCAGCTTTTATGTGTAGA	3660
QY	3661	GCACAGTTCAT	TTGAACTTTTGGGTACAGGGG	ATCTGCCATATGCTTACAAAATTTCC	3720
DB	3661	GCACAGTTCAT	TTGAACTTTTGGGTACAGGGG	ATCTGCCATATGCTTACAAAATTTCC	3720
QY	3721	AGCTGTGCCCC	CAGAAAACTAGAGGCTG	CAGCCAAATTTTATGAAATGTACAAACC	3780
DB	3721	AGCTGTGCCCC	CAGAAAACTAGAGGCTG	CAGCCAAATTTTATGAAATGTACAAACC	3780
QY	3781	TTTGTAACGTT	CTCTCGTTTAGGGTACCTG	ACATTTAGGAGGACCCCTAAATTTAGATC	3840
DB	3781	TTTGTAACGTT	CTCTCGTTTAGGGTACCTG	ACATTTAGGAGGACCCCTAAATTTAGATC	3840
QY	3841	ATTGACACAG	GAAGACCGCAATTTGAGG	CAAAAATTTATGCTGGGCGCACTAATAA	3900
DB	3841	ATTGACACAG	GAAGACCGCAATTTGAGG	CAAAAATTTATGCTGGGCGCACTAATAA	3900
QY	3901	TTTCAGTGTCT	CAAAAGAGGAGACAA	TTCTTAATACAGTGTCTGGAAGAGCCCTTACGGG	3960
DB	3901	TTTCAGTGTCT	CAAAAGAGGAGACAA	TTCTTAATACAGTGTCTGGAAGAGCCCTTACGGG	3960
QY	3961	GCTTAGTACTG	GCACCTAGCAGAAATTTCC	TACGCCCCGGGCGCAGTATCTCA	4020
DB	3961	GCTTAGTACTG	GCACCTAGCAGAAATTTCC	TACGCCCCGGGCGCAGTATCTCA	4020
QY	4021	GCATACCATCA	CTCTGGGACACTGTAATA	TATGTTACAGGAATAATGCCATTTTCAATGG	4080
DB	4021	GCATACCATCA	CTCTGGGACACTGTAATA	TATGTTACAGGAATAATGCCATTTTCAATGG	4080
QY	4081	ACAAACCACT	TATGAAATGCTGAGGAC	AAAGATATCAGCAAGGGGTAGGAAGATTTCC	4140
DB	4081	ACAAACCACT	TATGAAATGCTGAGGAC	AAAGATATCAGCAAGGGGTAGGAAGATTTCC	4140
QY	4141	AAATGAAAAG	AACACAGCTTAAAGGTCTT	TAACATGCACACATCTTCCCTAA	4200
DB	4141	AAATGAAAAG	AACACAGCTTAAAGGTCTT	TAACATGCACACATCTTCCCTAA	4200
QY	4201	TAAAGAACCC	CAACATACACAGCAAA	ATTGAAACGCTTATGCTGGGCTCTGTTG	4260
DB	4201	TAAAGAACCC	CAACATACACAGCAAA	ATTGAAACGCTTATGCTGGGCTCTGTTG	4260
QY	4261	GAAACGACAG	CTCTTCACTATGAAAGT	CAGCTGTGGAGTAAATCCCTAACTTAGATGA	4320
DB	4261	GAAACGACAG	CTCTTCACTATGAAAGT	CAGCTGTGGAGTAAATCCCTAACTTAGATGA	4320
QY	4321	CAGTTTTAAAA	CTCAATTTGACGCCCTAG	CGGGTGGGTTTGATCAACACCCCTCA	4380
DB	4321	CAGTTTTAAAA	CTCAATTTGACGCCCTAG	CGGGTGGGTTTGATCAACACCCCTCA	4380
QY	4381	AAATTTTTAAAA	ATACTACCAAAAGTGGG	CAATTTGAGGTATTAATCCATGGGAAT	4440
DB	4381	AAATTTTTAAAA	ATACTACCAAAAGTGGG	CAATTTGAGGTATTAATCCATGGGAAT	4440
QY	4441	TACTACTTTAG	TTCAATATGCTGTGGAA	TAAATGACAGCTTTTAAATTTGGG	4500
DB	4441	TACTACTTTAG	TTCAATATGCTGTGGAA	TAAATGACAGCTTTTAAATTTGGG	4500
QY	4501	ACCTCGAAAG	GCTACTGGAAGGTGGAA	TCCACAGCCTGGGCTTTTATCTCTCATGACG	4560

Db	4501	ACCTCGAAGAGCTACTGGAAGGTGGAATCCCGACGCTGGCGTTTATCTCTCATGAGC	4560
Qy	4561	TGGTCATTACCATATGCTACTGATGATGACCCACAGCTACAGTCAAGCAACACACAG	4620
Db	4561	TGGTCATTACCATATGCTACTGATGATGACCCACAGCTACAGTCAAGCAACACACAG	4620
Qy	4621	ACACGGATATGAAAGCCTGAAGAAATGTTGACCTGCGCAAAAGCGCTGACACCATGTA	4680
Db	4621	ACACGGATATGAAAGCCTGAAGAAATGTTGACCTGCGCAAAAGCGCTGACACCATGTA	4680
Qy	4681	AACATTCGCCACCGTCTCCTCAGCCAGGAACCGTCAACCCCGCCACCTGTGCGGCCCA	4740
Db	4681	AACATTCGCCACCGTCTCCTCAGCCAGGAACCGTCAACCCCGCCACCTGTGCGGCCCA	4740
Qy	4741	GATTATATGTCGCCCTCCCAATACCCCGTAGGCAACCATCTATAAGATACAGAGCTG	4800
Db	4741	GATTATATGTCGCCCTCCCAATACCCCGTAGGCAACCATCTATAAGATACAGAGCTG	4800
Qy	4801	TAGATATAAATTAATTAACATAGATATGAAACAAATGTAATAGAACTAAGATTATGTA	4860
Db	4801	TAGATATAAATTAATTAACATAGATATGAAACAAATGTAATAGAACTAAGATTATGTA	4860
Qy	4861	ATATGTACACAGTTTGGAATAAAGCCTTAATAATAATCATAGTGTATGTTTC	4920
Db	4861	ATATGTACACAGTTTGGAATAAAGCCTTAATAATAATCATAGTGTATGTTTC	4920
Qy	4921	TTTAAATAATTTCAAAAGAGACACCAATACAGATCGCGCGTCCGCCCGTAGGCGG	4980
Db	4921	TTTAAATAATTTCAAAAGAGACACCAATACAGATCGCGCGTCCGCCCGTAGGCGG	4980
Qy	4981	GACTTCGGTACAGATGCGGACAGTACGTACCTTCCTGTGACGTC	5028
Db	4981	GACTTCGGTACAGATGCGGACAGTACGTACCTTCCTGTGACGTC	5028
RESULT 4	AY083234	5017 bp DNA linear	VRL 28-AUG-2002
LOCUS	AY083234	B19 virus isolate D91.1 NS1, 7.5 kDa protein, VP1, X-9 kDa protein, VP2, and 11 kDa protein genes, complete cds.	
DEFINITION	AY083234		
ACCESSION	AY083234		
VERSION	AY083234.1	GI:22535302	
KEYWORDS			
SOURCE	B19 virus		
ORGANISM	B19 virus		
REFERENCE	Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.		
AUTHORS	Servant, A., Laperche, S., Lallemand, F., Marinho, V., De Saint Maur, G., Meritet, J.F. and Garbarg-Chenon, A.		
TITLE	Genetic Diversity within Human Erythroviruses: Identification of Three Genotypes		
JOURNAL	J. Virol. 76 (18), 9124-9134 (2002)		
PUBMED	12186896		
REFERENCE	2 (bases 1 to 5017)		
AUTHORS	Servant, A., Laperche, S., Lallemand, F., Marinho, V., De Saint Maur, G., Meritet, J.F. and Garbarg-Chenon, A.		
TITLE	Direct Submission		
JOURNAL	Submitted (11-MAR-2002) Laboratoire de Virologie, Hopital Trousseau (EA2391, UFR Saint-Antoine), 26 Avenue du Dr. Arnold Netter, Paris 75012, France		
FEATURES	Location/Qualifiers		
source	1..5017		
	/organism="B19 virus"		
	/mol_type="genomic DNA"		
	/isolate="D91.1"		
	/db_xref="taxon:10798"		
	/note="genotype: 3"		
	323..2338		
	/codon_start=1		
	/product="NS1"		
	/protein_id="AAL91012.1"		
	/db_xref="GI:22535303"		
CDS			

ORIGIN

Query Match 91.2%; Score 4587.4; DB 14; Length 5017;
Best Local Similarity 94.8%; Pred. No. 0;
Matches 4755; Conservative 0; Mismatches 261; Indels 1; Gaps 1;

```
/translation="MELFRGVLIHISNILDNCANDNWCMLDLDTDSWEPLNLTNRML  
AIIYSASAKLDFTCGGTAGCIFYFQVECNKEFEGYHIVHVGCPGLNARLNTVCVGB  
LFNNVLYHLKFLPGMTTKGKFRYGEQFIENYLMKKIPLNVVVCVNTIDGY  
IDTCISAPRRGACAKPRITANTDNVTSETGESSCGGDDVVPAGKGTAKLKFQT  
MYNLCENRVFTEDKWLVDNOYTLSSSHSGSQIQSALKLAIYKATNLVSTSTFL  
LHSDPEQVTCIKDNKILVLLCONVDPLVGHQVLKMDIKCKGKNTLWFYGPSTGK  
TNLAIAKTVPYGVNWNENPFNDVAGSLVWDEGIKSTIVEAAKILGGQP  
TRVDKMRGSVAVPGVPVITVTSNGDITFVSGNTTTHAKALKERMYKLNFTVCSP  
DNGLTEADVOQWLWCNAQSNHYENWAINVTFDGINADALPDQLTQTTIVDTS  
ISSGSESESSSESSFFNLITPGAWNSETPRSSPTVPQTSSGSGVSPVSSVFAA  
SWEEAFYTPLADQRELLVGVDPVWDVGRGLPVCCVEHINSGGSLGLCPHCINVGAW  
YNGKFRSEFTPLVRCSCVHGASNPFLVLTCKKCAIYSLGSLQSFVDYE"  
1797..2015  
/codon_start=1  
/product="7.5 kDa protein"  
/protein_id="AAL91015.1"  
/db_xref="GI:22535306"  
/translation="MPSTQTSKPPPLSQTPTPSAAVVVKALKNSVAAAFSTSSLOAPGT  
VKPRALVRPSGPVQENHLSAQFPFK"  
2331..4676  
/codon_start=1  
/product="VP1"  
/protein_id="AAL91013.1"  
/db_xref="GI:22535304"  
/translation="MSKTTDRWESNDTFAQDVYKQVQFYKVTGTDELELIQILKOH  
YNIISDNPLENPSLFDLIVARIKSNKNSPDLYSHHFQSHQGLSDHPHALSSNSSTE  
PRGENAVLSDHLHKPGQVSMQLPTNTYNGNELQAGPQNVDAIHDPRYSOL  
AKGLNIPYTHWTVADDELLKNIKNETGQAOAVKDYFTLKGAAPVAFHFOGLSEVPA  
YNASEKPSMTSVNSASAGTACGAGGSGNPTKSMWSEGTFTANSVYTCFSSQFLIPYD  
PEHYKVPSPASASAGTACGAGGSGNPTKSMWSEGTFTANSVYTCFSSQFLIPYD  
IENYISAPDALTVTISEIAVKDVTDKTGGOVDTSTGELCMVDHEYKYPVLQG  
QODTLAPELPIWVFPQYALTYGEVNTQVSGDSKLAESAFVLEHSSFQLLG  
TGSATMSYKFPAPVPPENLGCQHFYEMINPLYSRLGVDPDTLGGDPKFSLTHEDH  
AIQPFNFMGPLINSVSTGEGDTSNTGAKALGTSTGTSQSTRISLRPGVSPYHH  
WTDKYVGINAISHGQTTYGNAEDKEYQCGGRFPNEKEQLKQGLNMYHTFPNKG  
TQOYTQDIERPLMVGSVNNRRALHYESQLSNLDDSPKTQFAALGGWGLHOPPO  
IFKLIPQSGPIGGIKSMGITTLVOYAVGIMVTMTFKLGRKATGRWNPPQYVPH  
AAGHLVVLVDPTATDAKQHRHGYEKEPEELWTAKSrvHPL"  
2581..2826  
/codon_start=1  
/product="X-9 kDa protein"  
/protein_id="AAL91017.1"  
/db_xref="GI:22535308"  
/translation="MDSYLTTPMPYHPVTVVQNLKRWYLMKTYTSLGKLCNYPV  
LTMLGLMSYKLGRLRLMTVLQGFMTLIGIANWLSWE"  
3012..4676  
/codon_start=1  
/product="VP2"  
/protein_id="AAL91014.1"  
/db_xref="GI:22535305"  
/translation="MTSVNSAEASTGAGGSGSNPTKSMWSEGTFTANSVTCFESROP  
LIPVDRPHYKVPSPASASAGTACGAGGSGNPTKSMWSEGTFTANSVTCFESROP  
EFQHLNHYGSIAPDALTVTISEIAVKDVTDKTGGOVDTSTGELCMVDHEYKYP  
YVLGGQDTLAPELPIWVFPQYALTYGEVNTQVSGDSKLAESAFVLEHSSFQLLG  
FOLLGTSATMSYKFPAPVPPENLGCQHFYEMINPLYSRLGVDPDTLGGDPKFSLTHEDH  
THEDHAIQPFNFMGPLINSVSTGEGDTSNTGAKALGTSTGTSQSTRISLRPGVSPYHH  
QYVHWDYTKQVGINAISHGQTTYGNAEDKEYQCGGRFPNEKEQLKQGLNMYHTFPNKG  
FPNKGTCQYDQIERPLMVGSVNNRRALHYESQLSNLDDSPKTQFAALGGWGLHOPPO  
IFKLIPQSGPIGGIKSMGITTLVOYAVGIMVTMTFKLGRKATGRWNPPQYVPH  
AAGHLVVLVDPTATDAKQHRHGYEKEPEELWTAKSrvHPL"  
4597..4891  
/codon_start=1  
/product="11 kDa protein"  
/protein_id="AAL91016.1"  
/db_xref="GI:22535307"  
/translation="MQSNSTDDTKSLKNGCLPKAVCTHCKHSPPCPKGTVTHRPVPV  
PPRLYVPPVPSRQPSVKDITDAVEYKLLTRYEQHVIRMLRLCNMYTNLER"
```


Db 2161 GCTTTGCTCCTCAATGTAATTAATGTTGGAGCTTGGTATTAATGGATGGAATTTAGAGATT 2220
QY 2226 TACTCCAGACTTAGTGGCTGCTGAGTTGTCACTAGAGCGCTCTAACCCATTTCTGTGTT 2285
Db 2221 TACTCCAGACTTAGTGGCTGCTGAGTTGTCACTAGAGCGCTCTAACCCATTTCTGTGTT 2280
QY 2286 AACTTTGTAATAAATGTTGCTTACTCTGTGGATTAATAAGTTTGTGAGATTATGATGTAATA 2345
Db 2281 AACTTTGTAATAAATGTTGCTTACTCTGTGGATTAATAAGTTTGTGAGATTATGATGTAATA 2340
QY 2346 CCATTAACAAATGTTGGGAAGCAGTGACAAATTTGCCAGAGCTGTATAGAGTTTG 2405
Db 2341 CCATTCGACAGATGTTGGGAAGTAATGACAAATTTGCCAGAGCTGTATAGAGTTTG 2400
QY 2406 TCCAAATTTATGAAAAAGCTACTGGAACAGACTTAGAGCTTAATCAAAATTTTAAAGACC 2465
Db 2401 TACAAATTTATGAAAAAGCTACTGGAACAGACTTAGAGCTTAATCAAAATTTTAAAGATC 2460
QY 2466 ATTACAAATTTCTTTAGATTAATCTTTTAGAAAAACCTCTCTTTTATTTGACTTAGTTG 2525
Db 2461 ATTATACATTTCTTTAGATTAATCTTTTAGAAAAACCTCTCTTTTATTTGACTTAGTTG 2520
QY 2526 CTCGCATTTAAAGTAATCTTAAAAACTCTCCAGACCTTATATAGTCATCAATTTTTCAGAGCC 2585
Db 2521 CTCGCATTTAAAGTAATCTTAAAAACTCTCCAGACCTTATATAGTCATCAATTTTTCAGAGCC 2580
QY 2586 ATGGACAGTTATCTGACACACCCCATGCTTATCATCCAGTAACAGTAGTGACAAACCTA 2645
Db 2581 ATGGACAGTTATCTGACACACCCCATGCTTATCATCCAGTAACAGTAGTGACAAACCTA 2640
QY 2646 GAGGAGAAATGCAAGTATTAATCTAGTGAAGACTTACACAGCCCTGAGCAATTTAGCATAC 2705
Db 2641 GAGGAGAAATGCAAGTATTAATCTAGTGAAGACTTACACAGCCCTGAGCAATTTAGCATAC 2700
QY 2706 AATTACCCGCTACTAATGTTGGCTGGCAATGAGCTACAAAGCTGGCCCTCCGACA 2765
Db 2701 AACTACCCGCTACTAATGTTGGCTGGCAATGAGTTACAAAGCTGGCCCTCCGACA 2760
QY 2766 ATGCTGTGGACAGTGTGCAAGATTTATGACTTTAGGTATAGCCAAATTTGGCTTAAGTTG 2825
Db 2761 ATGCTGTGGACAGTGTGCAAGATTTATGACTTTAGGTATAGCCAAATTTGGCTTAAGTTG 2820
QY 2826 GAATAAATCTTTATACATTTGACGCTAGCAGATGAAGATTTGTTAAAAAATATAAAAA 2885
Db 2821 GAATAAATCTTTATACATTTGACGCTAGCAGATGAAGATTTGTTAAAAAATATAAAAA 2880
QY 2886 ATGAAACAGGTTTCAAGCACAGCAGTAAAGATTTACTTTTAAAGGTGACGCTG 2945
Db 2881 ATGAAACAGGTTTCAAGCACAGCAGTAAAGATTTACTTTTAAAGGTGACGCTG 2940
QY 2946 CCCTGTGGCCCAATTTTCAAGGAAGTTTACCGGAAGTGCCTGAGAGCCAGCTGTTGAGGAG 3005
Db 2941 CCCTGTGGCCCAATTTTCAAGGAAGTTTACCGGAAGTGCCTGAGAGCCAGCTGTTGAGGAG 3000
QY 3006 AATACCCAGCATGACTTCAGTTAACTCTGCAAGAGCCAGCACTGGTGCAGCGGGGAG 3065
Db 3001 AATACCCAGCATGACTTCAGTTAACTCTGCAAGAGCCAGCACTGGTGCAGCGGGGAG 3060
QY 3066 GTAGCAACCTTCAAAAAGCATGTGAGTGAAGGGCTTACATTTACTCTTAATTTCTGTAA 3125
Db 3061 GGAGCAACCTTCAAAAAGCATGTGAGTGAAGGGCTTACATTTACTCTTAATTTCTGTAA 3120
QY 3126 CTTGTACATTTCTTAGGCAATTTTAAATTCATATGATCCAGAGCATCATTTATAAGTGT 3185
Db 3121 CATGCACATTTCTTAGGCAATTTTAAATTCATATGATCCAGAGCATCATTTATAAGTGT 3180
QY 3186 TCTCTCCAGCAGTAGTAGTCCCAATGCTAGTGGGAAAGAGGCAAAAGTGTGCACTA 3245
Db 3181 TTTCTCCAGCAGCAGTAGTAGTCCCAATGCTAGTGGGAAAGAGGCAAAAGTGTGCACTA 3240
QY 3246 TTAGTCCCATTTAGGGTACTCTACTCCGTGGAGATCTAGATTTTAAATGCTTTTAAAT 3305
Db 3241 TTAGTCCCATTTAGGGTACTCTACTCCGTGGAGATCTAGATTTTAAATGCTTTTAAAT 3300

QY 3306 TGTGTTTCTCACCATTTAGAGTTTTCAGCACTTAATTTGAAATTTATGTTAGTATAGCTCCAG 3365
Db 3301 TGTGTTTCTCACCATTTAGAGTTTTCAGCACTTAATTTGAAATTTATGTTAGTATAGCTCCAG 3360
QY 3366 ATGCTTTTAACTCTAACTAATTTTCAAGAAATTTGCTGTTAAAGATGTTACAGACAAACAGGAG 3425
Db 3361 ATGCTTTTAACTCTAACTAATTTTCAAGAAATTTGCTGTTAAAGATGTTACAGACAAACAGGAG 3420
QY 3426 GAGGTGTCAAGTGTACTGACAGCACACAGGACGTTTGTGTATGTTAGTGGATCATGAT 3485
Db 3421 GAGGTGTCAAGTGTACTGACAGCACACAGGACGTTTGTGTATGTTAGTGGATCATGAT 3480
QY 3486 ATAAATACCCATATGTTGTTAGTCAAGGACAAAGACACACTAGCTCCAGAACTTGCCCATTT 3545
Db 3481 ATAAGTACCCATATGTTGTTAGTCAAGGACAAAGACACACTAGCTCCAGAACTTGCCCATTT 3540
QY 3546 GGGTTTACTTTTCCCTCCAGTATGCTTACTTAAACAGTAGGTGAAGTAAACACACAGGAA 3605
Db 3541 GGGTTTACTTTTCCCTCCAGTATGCTTACTTAAACAGTAGGTGAAGTAAACACACAGGAG 3600
QY 3606 TTTCAGGACAGCAGCAAAATTTGGCTAGTGAAGATCAGCTTTTATGTTAGTGGACACA 3665
Db 3601 TTTCAGGACAGCAGCAAAATTTGGCTAGTGAAGATCAGCTTTTATGTTAGTGGACACA 3660
QY 3666 GTTTCATTTTAACTTTTGGGTACAGGGGATCTGCACTATGTCCTCAAAATTTCCAGCTG 3725
Db 3661 GCTCTTTTCAACTTTTGGTACAGGTGGCTCTGCTACAAATGCTCTTAAATTTCCAGCG 3720
QY 3726 TGCCCCAGAAAACTGAGAGGCTGACAGCCAACTTTTATGAAATGTTACAACTTTTGT 3785
Db 3721 TGCCCCAGAAAACTGAGAGGCTGACAGCTTAAATTTTATGAAATGTTACAACTTTTGT 3780
QY 3786 ACGGTTCTCGTTTGGGTACCTGACACATTTAGAGGGGACCCCTTAAATTTTAGATCAATGA 3845
Db 3781 ATGTTTCTCGTTTGGGTACCTGACACATTTAGAGGGGACCCCTTAAATTTTAGATCAATGA 3840
QY 3846 CACACAGAGACACCAATTTAGCAGCAAACTTTATGCTGGGCGCACTAATAATTTAGTCAAG 3905
Db 3841 CACACAGAGACACCAATTTAGCAGCAAACTTTATGCTGGGCGCACTAATAATTTAGTCAAG 3900
QY 3906 TGTCTACAAAGAGAGAGACAATTTCTAATACAGTGTGGAAGAGCCCTTTACGGGGCTTA 3965
Db 3901 TGTCTACAAAGAGAGAGACACCTCTAATACAGTGTGGAAGAGCCCTTTACGGGGCTTA 3960
QY 3966 GTACTGCACTAGCAAAACACAGAAATTTCCCTACGCCCCGGGCGCACTATCTCAGCCAT 4025
Db 3961 GTACTGCACTAGCAAAACACAGAAATTTCCCTACGCCCCGGGCGCACTATCTCAGCCAT 4020
QY 4026 ACCATCTCGGACACTGATTAATAATTTTACAGGAATAAATGCCATCTCACATGGACAAA 4085
Db 4021 ACCATCTCGGACACTGATTAATAATTTTACAGGAATAAATGCCATCTCACATGGACAAA 4080
QY 4086 CCATTTATGAAATGCTGAGGACAAAGATGTTACAGCAAGGGGTAGGAAGATTTCCAAATG 4145
Db 4081 CCATTTATGAAATGCTGAGGACAAAGATGTTACAGCAAGGGGTAGGAAGATTTCCAAATG 4140
QY 4146 AAAAAGAACAGCTTAAAGCAGTTTACAGGCTTAAACATGACACATCTTCCCTTAATAAG 4205
Db 4141 AAAAAGAACAGCTTAAAGCAGTTTACAGGCTTAAACATGACACATCTTCCCTTAATAAG 4200
QY 4206 GAACCCAACTACACAGACCAATTTGAAGAGCCCTTAAATGTTGGGCTCTCTGTGTGGAACA 4265
Db 4201 GTACCCAACTACACAGATCAATTTGAAGAGCCCTTAAATGTTGGGCTCTCTGTGTGGAACA 4260
QY 4266 GAAGAGCTCTTCACTATGAAAGTGTGAGTGAAGTAAATCCCTTAATGATGATGAT 4325
Db 4261 GAAGAGCTCTTCACTATGAAAGTGTGAGTGAAGTAAATCCCTTAATGATGATGAT 4320
QY 4326 TTAATACTCAATTTGAGCGCTTAGCGGGTGGGGTTTGCATCAACACCCCTTCAAAAT 4385
Db 4321 TTAATACTCAATTTGAGCGCTTAGCGGGTGGGGTTTGCATCAACACCCCTTCAAAAT 4380

Qy	334	CTATTTGGGGGTGCTTTGCCA	CAATTTCCCTCTAA	CAATTTCTGGAC	TGTGCTAATGATAA	CTGG	393
Db	241	CTATTTAGGGGTGTGTGGCA	TATTTCCCTCTAA	CAATTTTGA	CTGCTGTANTGAT	TA	CTGG
Qy	394	TGGTGCTCTATGCTAGAC	TTAGTACTTCTGAC	TGGGA	CCACTAAC	CCCAATTTCTTAACAG	453
Db	301	TGGTGCTCTATGCTGGAT	TTTAGATCTTCTGAC	TGGGA	CCCACTAAC	CTCACTCTAACAG	360
Qy	454	TTAATGGCAATATATTTAAG	CAGTGTGTTCTTAA	AACTTGATTTTACT	TGGGGGGCGCGCTA		513
Db	361	CTAATGGCAATATATTTAAG	TAATGTTGCTTCTTAA	CTGGA	TTTACTTGGGGGGCGCTG		420
Qy	514	GCAGTGTGCTTATAC	TTTTTTCAGTGGAA	TGTAA	CAAAATTTGAG	GAAGGCTATCATATC	573
Db	421	GCGGTGTGCTTATAC	TTTTTTCAGTGGAA	TGTAA	CAAAATTTGAG	GAAGGCTACCAATAT	480
Qy	574	CATGTAGTTATTTGGTGGT	CAGGACTAAATGCT	PAGAAA	CTTAACTGTGTGCGTGAAGGT		633
Db	481	CATGTAGTTATTTGGTGGT	CCAGACTTAATGCT	TAGAAA	CTTAACTGTGTGAGAGG		540
Qy	634	TTATTTAAATAGTTCTTTA	CCATCTGTGTA	AACTGAAA	AGTGTAA	AACTTTAAATTTTGCCA	693
Db	541	TTGTTTAAATAGTTGCTTTA	CCACCTGGTAA	ATGAA	AGTGTAA	AACTTTAAATTTTGCCA	600
Qy	694	GGGATGACTACCA	AAAGGAAAATATTTT	TAGAGATGG	GAGCAGTGTATAGAAA	TTTACCTTA	753
Db	601	GGAAATGACTACAAA	AGGAAATATTTT	TAGAGATGG	GAGCAGTGTATAGAAA	TTTACCTTA	660
Qy	754	ATGAAAAAAATTCCTTTA	ATGTTGTGTG	TAA	CAAAATTTTAC	GGGTATATAGAC	813
Db	661	ATGAAAAAAATTCCTTTA	ATGTTGTGTG	TAA	CAAAATTTTAC	GGGTATATAGAC	720
Qy	814	ACCTGTATTTTCGGCCT	CTTTTTCGGCGAG	AGCTGTCA	TGCTTAA	AAAGCCCGCATTACT	873
Db	721	ACCTGTATTTTCGCAT	CTTTTTHAG	CAAGAGCTTGC	CAATGTAAAA	AAACCTCGAATTAGT	780
Qy	874	GCAATACAGACAGTGTCTA	ATTAATGAA	CTGGGAGTCTAG	CTGTGTGAGGGGGAGATGTT		933
Db	781	ACAAAACACAGACACTGT	ATAATGAAGAGGGGAAT	CAAGCTGTGTGAGGGGGAGATG			840
Qy	934	GTGCCATTCGCTGGAA	AGGGAACAAAGCGGGT	TAAAGTTTCA	AAACCATGGTAAATGG		993
Db	841	GTGCCATTCGCGGAG	AGGGAACCAAGCAGGCT	TAAAGTTTCA	AAACCATGGTAAATGG		900
Qy	994	CTATGTGAAAACAGAGTA	TTTACTGA	AGATAAATGGAA	TTTAGTGGATTTTAA	CCAAATAT	1053
Db	901	CTATGTGAAAACAGAGTGT	TTTACTGA	AGATAAATGGAA	TTTAGTGGATTTTAA	CCAAATAT	
Qy	1054	ACTTTATTAAGTAGCAGT	CAAGTGGCAGCTTCA	AAATTTCAAGTGCCT	THAAGTTAGCT		1113
Db	961	ACATTTATTAAGCAGTAGT	CAATGTGGAGT	TTTCAAAATACAAAGTGCAT	TTAAAGCTAGCT		1020
Qy	1114	ATTTATAAAGCTACTPA	ACTTAGTACCCACTAGT	ACATTTCTTGT	TACATTCAGACTTTTGAG		1173
Db	1021	ATTTATAAAGCTACTPA	ACTTAGTTCCTACTAGT	ACATTTTAA	TGCAATTCAGACTTTTGAG		1080
Qy	1174	CAGGTTACTTCGATTA	AGAAATAAATAGT	AAAAATTTATTTGTG	GTCAAACTATGAT		1233
Db	1081	CAGGTTACTTCGATTA	AGAAATAAATAGT	AAAAATTTATTTATG	TCACAGAAATTTATGAT		1140
Qy	1234	CCTCTTTTAGTGGGTCA	ACATGTGTAAAGTGG	ATTGACAAAAAATGTG	TGTAATAAAAAA		1293
Db	1141	CCTCTTTTAGTGGGTCA	ACATGTGTAAAGTGG	ATTGACAAAAAATGTG	TGTAATAAAAAA		1200
Qy	1294	ACCCGTGTGTTTTACGG	CCACCAAGTACT	TGGAAAAA	CAAAATTTGGCAATGGCTATTTGCT		1353
Db	1201	ACCCGTGTGTTTTACGG	CCCGCCCAAGTACT	TGGAAAAA	CAAAATTTGGCAATGGCTATTTGCT		1260
Qy	1354	AAAACTGTAC	CAGTGTATGGAATGGT	GAAATGGAATTAATGAA	AACTTTTCCATTTAATGAT		1413
Db	1261	AAAACTGTCCAGTGTAT	GATGCGTTAATTTGGA	TAAATGAA	AAATTTTCCATTTAATGAT		1320
Qy	1414	GTACGGGGGAAAGTTT	GGTGTCTGGATGA	AGGCAATTTAAGTGC	CAATTTGTGGAA		1473

Db	2821	AAAAGATTACTTTACTTTAAAGAGGTGCAGCTGCCTCTGTGCCCACTTTTCAAGGAAGTTT	2880
Qy	2974	ACCGGAAGTGCCTGGGTACAAAGCCCTCAGAAAAATACCCAGCATGACTTCAGTTAACTC	3033
Db	2881	GCCGGAAGTCCCGCATACAAGCCCTCAGAAAAGTACCCAAGCATGACTTCAGTTAACTC	2940
Qy	3034	TGCAGAAGCGACACTGTGTGAGCGGGGGAGGTAGCMACCCCTACAAAAAGCATGTGGAG	3093
Db	2941	TGCAGAAGCCAGCACTGTGTGAGAGGGGGAGGAGTAATCTCTGTCAAAAGCATGTGGAG	3000
Qy	3094	TGAAGGGGCTACATTTACTGTCTAAATCTGTAAAGTGTACATTTCTTAGGGCAATTTTAAAT	3153
Db	3001	TGAGGCGCCACTTTTACTGCCAATCTGTAACTGTGTACATTTTCCAGACAGTTTTTAAAT	3060
Qy	3154	TCCATATGATCCAGAGCATCAATTAATAAGTGTCTCTCCAGCACTAGTAGTGCACAA	3213
Db	3061	CCCATATGCCAGCAGCACCATTATAAAGTGTCTTCTCCGCAGCTAGTAGTGCACATA	3120
Qy	3214	TGCTAGTGGGAAGAGGCAAGGTGTCACATATTAGTCCCATATTAGGGGTACTCTACTCC	3273
Db	3121	TGCCAGTGGGAAGAGGCNAAGGTTTGACATATTAGTCCCATATTAGGGGTACTCAAGCC	3180
Qy	3274	GTGAGATPACTTAGAATTTAATGCTTTAAATTTGTTTTTCTCCACATTAGAGTTTCAACA	3333
Db	3181	ATGAGATACTTAGACTTTAATGCTTTAAACTTAATTTTTTCACTTTAGAAATTTCAACA	3240
Qy	3334	CTTAATTTGAAATTTATGGTAGTAGCTCCAGATGCTTTAACTGTGTACTATTTCAGAAAT	3393
Db	3241	TTTAATTTGAAATTTATGGAAGTAGAGCCCTGATGCTTTAACTGTTAACCATATCAGAAAT	3300
Qy	3394	TGCTGTAAAAGATGTCACAGCAAAAACAGGAGGAGGTGTCAAGTTTACTGACAGCACCAC	3453
Db	3301	TGCTGTTAAAGATGTTACAGACAAAAACAGGAGGAGGGTGCAGTTTACTGACAGTACTAC	3360
Qy	3454	AGGACGTTTGTGTATGTTAGTGGATCATGAGTATAAATACCMATGTGCTAGGTCAAGG	3513
Db	3361	AGGCGGTTTATGCAATGTTAGTAGATCATGAGTACAAGTATCCATATGTGTAGGTCAAGG	3420
Qy	3514	ACRAGACACACTAGCTCCAGAACTGCCCAATTCGGGTTTACTTTTCCCCCCAGTATGCTTTA	3573
Db	3421	ACAGGATACCTTAGCCCCCAGAACTGCGCTATTTCGGGTACTTTTCCCCCTCAATATGCTTA	3480
Qy	3574	CTTAAACAGTAGGTGAAGTAAACACAMAGGAATTTCCAGGAGACAGCAAAAATTTGGCTAG	3633
Db	3481	TTTAAACCGTGGGAGATGTAACACACAGGGAATTTTCAGGGGACAGTAAAAAGCTAGCAAG	3540
Qy	3634	TGAAGATCAGCTTTTATGTGTGTAGAGCACGTTTCATTTGAACTTTTCGGTACAGGGG	3693
Db	3541	TGAAGAATCAGCATTTTATGTTTGGNAACACAGTTTCAATTTGAATCTGTAGTACAGTGG	3600
Qy	3694	ATCTGCCACTATGTCTCTACAAATTTCCAGCTGTGCCCCCAGAAAAACCTAGAAAGGCTGCAAG	3753
Db	3601	CTCTGCCACTATGTCTCTATAAATTTCCACAGTGTGCCCCCAGAAAAACCTTGAGGGTGTAG	3660
Qy	3754	CCAACTTTTATGAATGTACAAACCTTTGTACGGTCTCTCGTTAGGGGTACCTGACAC	3813
Db	3661	CCAACTTTTATGAATGTACAAACCCCTGTATGGGTCTCGTTAGGGGTACCTGACAC	3720
Qy	3814	ATTAGAGGGGACCCCTAAATTTTAGATCATTTGACACACAGGAAGCCAGCAATTTCAAGCCACA	3873
Db	3721	ACTAGGGGGGACCCCTAAATTTAGATCAATTAACCTCAGGAAGATCATGTCAATTTCAAGCCACA	3780
Qy	3874	AAACTTTTATGCCCTGGGCCACTAATAATTCAGTGTCTACCAAGAGAGGACAAATTTCTAA	3933
Db	3781	AAACTTTTATGCCCTGGGCCACTAGTAAACTCAGTGTCCACTTAAGAGGGGAGACACTTCCAA	3840
Qy	3934	TACAGTGTCTGGAAGAGCCCTTACGGGGCTTAGTACTGGCACTAGCCAAAAACACCAAGAT	3993
Db	3841	TACAGGCGCGGAAAGCCCTTACGGGGCTTAGTACTGGCACTAGTCAAGACCAAGAT	3900
Qy	3994	TTTCCCTTACCGCCCGGCAGTATCTCAGGCATACCATCACTGGGACCTGATATAATATGT	4053
Db	3901	ATCCCTTCCGCCCAGNACCAAGTGTCTCAGCCATACCAATTACTGGGACCTGATAGTATGT	3960

QY	4054	TA	CAGGAATAAATGCCATTTCAATGGACAAACCACTTATGGAATGCTGAGGACAAAGA	4113
DB	3961	CACAGGAATAAATGCTATTTACACGGACAAACCACTTATGGAATGCTGAAGACAAAGA	4020	
QY	4114	GTATCAGCAAGGGGTAGGAAGATTTCAAATGGAAGAAACAGCTTAAGCAAGTTACAGG	4173	
DB	4021	GTATCAGCAAGGGGTAGGAAGATTCCCAATGGAAGAGCACTTAACACAGTTTACAAGG	4080	
QY	4174	TCCTTAACATGCACACATACTTCCCTTAATAAAGAACCCAAACAAATACACAGACCAAAATGA	4233	
DB	4081	CCATAAACATTCACACATACTTCCAAACAAAGGAACCCAAACAAATACACAGATCAATTTGA	4140	
QY	4234	AGGCCCTCTTATGTTGGGCTCTGTTTGGAAACAGAAAGCTCTTCACTATGAAGATCAGCT	4293	
DB	4141	AGCCCCCTTAATGGTAGGGTCTGTGTGGAAACAGAAAGCTCTTCAATTATGAGAGTCACT	4200	
QY	4294	GTGGAGTAAAAATCCCTAACTTTAGATGACAGTCTTTAAAACTCAATTTGCAGCCCTAGCGG	4353	
DB	4201	GTGGAGTAAAAATCCCAACTTTAGATGACAGTCTTTAAACCCNATTGAGCCCTGGGCGG	4260	
QY	4354	GTGGGGTTTGCATCAACCAACCCCTCAAAATATTTTTTAAAAATCTACCAAAAGTGGGCC	4413	
DB	4261	GTGGGGTTTACATCAACCAACCTCTCAAAATATTTTTTAAAAATATCTGCCACAAAGTGGACC	4320	
QY	4414	AAATTGGAGGTATTAATTCATGGGAAATTACTACTTTTAGTTTCAATATATCTGTGGGAATAAT	4473	
DB	4321	AAATTGGGGTATTAATTCATGGGAATCACTACCTTAGTTTCAATATGCGAGTGGGAATTAT	4380	
QY	4474	GACAGTTACATGACCTTTAAATTTGGGACCTCGAAAGGCTACTGGAAAGTGGAAATCCCCA	4533	
DB	4381	GACAGTTACTATGACATTTAAATTTGGGACCTCGTAGGCTACTGGTAGTGGAAATCCACA	4440	
QY	4534	GCCTGGCGTTTATCCTCCTCATGCAGCTGTGTCATTTACCATATGTACTGTATGACCCCCAC	4593	
DB	4441	GCCTGGAGTGTATCCTCCTCATGCAGCTGTGTCATTTACCATATGTACTGTATGACCCCTAC	4500	
QY	4594	AGCTACAGATGCAAAAGCAACCAACACACACGATATGAAAGCCCTGAAGAAATTGTGGAC	4653	
DB	4501	AGCTACAGATGCAAAACCAACACACACGATATGAAAGCCCTGAAGAAATTGTGGAC	4560	
QY	4654	TGCCAAAGCCGTGTGCACCCATTGTAAACATTTCCCCACCGTCTCTCAGCCAGGACCG	4713	
DB	4561	TGCCAAAGCCGTGTGCACCCATTGTAAACATTTCCCCACCGTCTCTCAGCCAGGAAACCG	4620	
QY	4714	TCACCCACCCCAACCTGTGCCGCCAGATTATATGTGCCCCCTCCAAATACCCCGTAGGC	4773	
DB	4621	TAAACCAACCGTCTCTGTGTACCAACCCAGATTATATGTGCCCCGCCCAATACCCCGCAGAG	4680	
QY	4774	AACCATCTATAAAGATACAGACGCTGTAGAATATAAATTTAATTAAGTATAGTAAACAC	4833	
DB	4681	AACCGTTGTAAAGATACAAATGCTGTAGAATATAAGTTACTTAACCCGTTATGAACAC	4740	
QY	4834	ATGTAATTAGAATGCTAAAGATTATGTAATATGTATGACACAAAGTTTGGAAAAATAAAGCCTT	4893	
DB	4741	ATGTAATTAGAATGCTTAGATTGTGTAAATATGTATGATACAAATTTGGAAAAATAAATTAATCTT	4800	
QY	4894	AAATAAATAATTCATAGTGTATGGTCTTTAAAAATTTCAAAA	4937	
DB	4801	AAATAAATAGCTAATAGTGTATGTTACTTTAAAAATTTTTTAAAA	4844	

[illegible]

Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.

REFERENCE

1 (bases 1 to 4612)
Hokynar,K., Soderlund-Venermo,M., Pesonen,M., Ranki,A.,
Kiviluoto,O., Partio,E.K. and Hedman,K.
A new parvovirus genotype persistent in human skin
Virology 302 (2), 224-228 (2002)
22329669
MEDLINE
PUBMED
12441066
2 (bases 1 to 4612)
Hokynar,K., Soderlund-Venermo,M., Ranki,A. and Hedman,K.
Direct Submission
Submitted (09-JUL-2001) Dept. of Virology, Univ. of Helsinki, POB
21 (Haartmaninkatu 3), Helsinki 00014, Finland

FEATURES

source

Location/Qualifiers

1..4612
/organism="B19 virus"
/mol_type="genomic DNA"
/isolate="Labi"
/db_xref="taxon:10798"
/note="similar to the sequence deposited in GenBank
Accession Number M13178
genotype: K71"
285..2300
/gene="NS1"
285..2300
/gene="NS1"
/note="multifunctional"
/codon_start=1
/product="non-structural protein NS1"
/protein_id="AAK95570.1"
/db_xref="GI:15421203"
/translation="MELFRGLHISNILDANDNWCMSMLDLDSDWEP LTHSNRLM
AIYLSNVASKLDTGGPGLAGCLYFFQVGCNKFEGYHIVHVGPGINARNLTVCVEG
LFNNLVHLVNGVNGKFLPGMTTKGYFRDGFQIENYLMKKIPLNVVVCVNTIDGY
IDICIASFRGACHAKPRI SANTDTVANNEAGSCGGDVVPFAGKTKAGLEKQT
MWNLCENRFTDKWKLDFNQTLLSSHSGSFQIQSALKLAIKATNLPTSTFLP
TNLMAIAKTPVYGVNWNENPFNDVAGSLVWDEGIIKSTTVEAAKAILGGQP
TRVDQMRGSVAVGVVITNSGDIITFVVGNTTTHAKALKERMKLNFTRGSP
DMGLLEADVQWMLWCNAQWNHYENWAI NYTFDPGINADALHPDLQTVPIVADTS
VSSSGSESSELSSEFFNLITPGANSETPRSTPVGTSSESFVSGSPVSEVVA
SWEAEATFLADQFRLLVGVYVWDVGRPLVCCVQHINNNGGGLGCLPHCINVGW
YNGWKRREFTDLVRCSCHVGASNPFSVLTKCKKCAVLSGLQSPVDYE"
2293..>4612
/gene="VP1"
2293..>4612
/gene="VP1"
/note="structural protein"
/codon_start=1
/product="minor virus capsid protein VP1"
/protein_id="AAK95571.1"
/db_xref="GI:15421204"
/translation="MSKESGKWESEDDKAKDVYKQVFEYKVKVGTDLLELIQDKH
YNIISLNDPLENSLDFDLVARIKNSLKDSDPLXSHFQSHQSLSDRPHALSSESSITE
PRGENAVLESDLHKQGVSIQLPGTYVQPGNELQAGPPQSAVDSAAIRHDFRYSOL
AKGIPNYHTWDBELKINIKETQFAQVADYFTLKGAAPVAHFQGLSPEVPA
YNASEKYKFSVNSAEASTAGGGSNPVKMSSEGATFTANSVTCFSRQPLIPEYD
PEHYKVFSPAASSCHNASKGKAVCTISPIMGYSTPWRYLDFNALNLFSPLEFOHL
IENYGIAPDALVTITSEIAVKDVTDKTGGGVQVDTSTTGRCLMLVDHYEYKYPVLQ
QDTLAPELPIFPFPQYALTVGVNTQISGDSKKLASBESAFVLEHSEFELLG
TGSATSYKFPVPVPPENLEGSCQHFYEMNPLYSLRGLVDFDTLGGDPKFRSLTBEDH
AIQPNFMPLVNSVSTKEGDTNTGAGKALITGLSTGSQSTRISLRPGVSPYHH
WDTKVVTGINALSHGQTTYGNAEDKEYOQGVGRFNEKEQLKQLGNIHTYFPNKG
TQOYTDQIRPLRVGSMNRRLHYESQLWSKIPNLDSDFKTQFALGGMGLHOPPPQ
IFKLILPQSGPIGGIKSMGITTLVOYAVGIMVTMTFKLGRKATGRWNPQGVPPH
AAGHLPIVLDPTATDAKQHRHGYEKPEELWT"
2974..>4612
/gene="VP2"
2974..>4612
/gene="VP2"
/note="structural protein"
/codon_start=1
/product="major virus capsid protein VP2"

gene

CDS

Query Match 78.4%; Score 3941.8; DB 14; Length 4612;
Best Local Similarity 91.0%; Pred. No. 0;
Matches 4200; Conservative 0; Mismatches 412; Indels 1; Gaps 1;
QY 43 GAAGTCCCGCTACCGGCGGACCGCGGCATCTGATTTGGTGTCTCTTTTGAAT 102
Db 1 GAAGTCCCGCTACCGGCGGACCGCGGCATCTGATTTGGTGTCTCTCTTTTGAAT 59
QY 103 TTGGCGGGCTTTTCCCGCTTATGCATAAGCGGCCCATGTTTAAATGTTTAAAT 162
Db 60 TCGCGGGCTTTTCCCGCTTATGCATAAGCGGCCCATGTTTAAATGTTTAAAT 119
QY 163 TTAATTTGACAAACCGCTAAACGGTTACTAGCGCGGAGTTACGGCGGTATATAAGCAGC 222
Db 120 TTGATTTGACAAACCGCTAAACGGTTTATGCGCGGAGTTACGCATGTTATAGCAGA 179
QY 223 TCGGTTCCTGACACTTTCTTTCTGGTGTCTTTTGAACCTGGAACCTGCTGTTCTTT 282
Db 180 TGAATTTCTGACAACTTTCTTTCTGGTGTCTTTTGAACCTGGAACCTGCTGTTCTTT 239
QY 283 GCCTGTAGTAAACAGGTATTTTACTACTACTTTTAACTTAACTGATGAGCTATTCGG 342
Db 240 GCTGTAAATTAACAGGTATTTTACTACTACTTTTAACTTAACTGATGAGCTATTTAG 299
QY 343 GGTGTCTTCCACATTTCTCTCAACATTCCTGACTGTGCTGCTAACTGATGAGCTATTC 402
Db 300 GGTGTGTGCTATTTCTCTCAACATTTTAGCTGGCTTAAGTAACTGATGAGCTATTC 359
QY 403 ATGCTAGACTTAGACTATCTTCTGCTGGGAAACCACTAAACCTCTTAAACAGATTAATGGCA 462
Db 360 ATGCTGATTTAGACTATCTTCTGCTGGGAAACCACTAAACCTCTTAAACAGATTAATGGCA 419
QY 463 ATATATTTAAGCAGTGTGCTTTCTAACTTGAATTTTACTGGGGGGCGCTACGAGTTCG 522
Db 420 ATATATTTAAGTAAATGTTGCTTTCTAACTTAGATTTTACTGGGGGGCGCTACGAGTTCG 479
QY 523 TTATATCTTTTTCAGGTGGAATGTAAACAAATTTGAGGAAGGCTATCATATCCATGTAGTT 582
Db 480 TTATATCTTTTTCAGGTGGAATGTAAACAAATTTGAGGAAGGCTATCATATCCATGTAGTT 539
QY 583 ATTGTGTGTCAGGACTAAATGCTGAGAACTTAACTGTGCTGCTGAGAGGTTTATTTAAT 642
Db 540 ATTGTGTGTCAGGACTTAAATGCTGAGAACTTAACTGTGCTGCTGAGAGGTTTATTTAAT 599
QY 643 AATGTTCTTTTACATCTGTTACTGAACTGTTAACTTTAAATTTTTCGAGGAGTACT 702
Db 600 AATGTTCTTTTACATCTGTTACTGAACTGTTAACTTTAAATTTTTCGAGGAGTACT 659
QY 703 ACCAAGGAAAATATTTAGAGATGAGAGAGCTTTTATAGAAAATTTACTTAAATGAAAAA 762
Db 660 ACTAGGGAAGATTTTATAGATGGAGAACAGTTTATAGAAAATTTACTTAAATGAAAAA 719
QY 763 ATTCTCTTTAAATGTTGT 822
Db 720 ATTCTCTTTAAATGTTGT 779
QY 823 TCGGCTCTTTTCGGCGGAGGAGCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 882
Db 780 TCTGCATCTTTTAGACGAGGAGCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 839

QY	883	GACAGTGTCTAATGAACTGGGAGTCTAGCTGTGGAGGGGAGATGTTGTGCCATTC	942
Db	840	GACACTGTTAATAATGAAGCCGGGAATCAAGCTGTGGAGGGGAGATGTTGTGCCATTT	899
QY	943	GCTGGAAGGGAACAAAGCGGGGTTAAAGTTTCAAAACCATGTGTAATTCGCTATGTGAA	1002
Db	900	GCGGAAAGGGAACAAAGCGAGGTTAAAGTTTCAAAACAATGGTAAATTCGTTATGTGAA	959
QY	1003	AACAGAGTATTCTGAAGATAAATGAATTAAGTGAATTTAAACCAATATACATTTATTA	1062
Db	960	AACAGAGTATTCTGAAGATAAATGAAGTGAATTTAAACCAATATACATTTATTA	1019
QY	1063	AGTAGCAGTCAAGTGGCAGCTTTCAAAATCAAAGTGCCTTAAAGTTAGCTATTTATATA	1122
Db	1020	AGCAGTAGTCATAGTGGAGTTTCAATACAAAGTGCATTAAGTAGCTATTTATATA	1079
QY	1123	GCTACTAACTTAGTACCACCTAGTACATCTCTGTGTTACATTCAGACTTTGAGCAGGTACT	1182
Db	1080	GCTACTAACTTAGTTCCTACTAGTACATTTTAAATGCATTCAGACTTTGAGCAGGTACC	1139
QY	1183	TGCATTAAGAAATAAAATAGTAAATTAATTTAGTGCATAAATCTATGATCCTCTTTTA	1242
Db	1140	TGCATTAAGAAATAAAATAGTAAATTAATTTAGTGCATAAATCTATGATCCTCTTTTA	1199
QY	1243	GTGGGTCAACATGTTTAAAGTGGATTGACAAAAATGTGTTAAAAAAACACCTGTGG	1302
Db	1200	GTGGGTCAACATGTTTAAAGTGGATTGACAAAAATGTGTTAAAAAAACACCTGTGG	1259
QY	1303	TTTTACGGCCACCAAGTACTGCAAAAAAATTTGGCAATGCTATTGCTTAAACTGTA	1362
Db	1260	TTTTACGGCCCGGAGCAGTGGAAAAACAAATTTGGCAATGCTATTGCCAAAACTGTC	1319
QY	1363	CCAGTGTATGGAATGTGTAATGGAATAATGAAAACTTTCCATTTAATCATGTAGCGGG	1422
Db	1320	CCAGTGTATGGAATGTGTAATGGAATAATGAAAACTTTCCATTTAATCATGTAGCGGG	1379
QY	1423	AAAAGTTTGGTGTCTGGGATGAAGCAATTAATTAAGTCCACTATTGTGGAAGCTGCAAAA	1482
Db	1380	AAAAGTTTGGTGTCTGGGATGAAGCAATTAATTAAGTCCACTATTGTGGAAGCTGCAAAA	1439
QY	1483	GCCATTTTATGTTGCTGACCAACAGGTTAGTATCAGAAAATGGTGGCAGTGTGGCAGTG	1542
Db	1440	GCCATTTTATGTTGCTGACCAACAGGTTAGTATCAGAAAATGGTGGCAGTGTGGCAGTG	1499
QY	1543	CCGGTGTGCTGTGTTTAAACCAAGCAATGTGTAATTAATTAAGTCCACTATTGTGGAAGCTGCAAAA	1602
Db	1500	CCTGTGTGCTGAGTGTGTAATTAACCAAGCAATGTGTAATTAATTAAGTCCACTATTGTGGAAGCTGCAAAA	1559
QY	1603	ACCACCTACAACTGTGATGCTTAAAGCCTTAAAGGACGATGTGTAAGCTTAACTTTTACC	1662
Db	1560	ACCACCTACAACTGTGATGCTTAAAGCCTTAAAGGACGATGTGTAAGCTTAACTTTTACC	1619
QY	1663	ATAAGATGTAGCCCTGACATGGTGTACATTAACAGAGGCTGTGTAACCAATGGCTTAACT	1722
Db	1620	GTAAGATGTAGCCCTGACATGGTGTACATTAACAGAGGCTGTGTAACCAATGGCTTAACT	1679
QY	1723	TGGTGTATGCAAAAGCTGGAGCCACTATGAAAACTGGGCAATAAATCTACACATTTGAT	1782
Db	1680	TGGTGTATGCAAAAGCTGGAGCCACTATGAAAACTGGGCAATAAATCTACACATTTGAT	1739
QY	1783	TTCCCTGGAAATAATGACAGATGCCCTCCACCCAGATCTCCAAACCAACCCCAATGTGCCA	1842
Db	1740	TTCCCTGGAAATAATGACAGATGCCCTCCACCCAGATCTCCAAACCAACCCCAATGTGCCA	1799
QY	1843	GACACAGTATCAGCAGCAGTGGTGTGAAAGCTCTGAAGAACTCAGTGAAGAGCAGCTTT	1902
Db	1800	GACACAGTATCAGCAGCAGTGGTGTGAAAGCTCTGAAGAACTCAGTGAAGAGCAGCTTT	1859
QY	1903	TTCAACCTCATCATCTCAGGCGCCTGGAAACAGTGAACCCCGCGCTCTAGTACGCCGCTC	1962
Db	1860	TTCAACCTCATCATCTCAGGCGCCTGGAAACAGTGAACCCCGCGCTCTAGTACGCCGCTC	1919

QY	1963	CCGGGACAGTTTCAGGAGATCATTTGTGCGAAGCCAGTTTCTTCCGAAGTGGTAGCC	2022
Db	1920	CCGGGACAGTTTCAGGAGATCATTTGTGCGAAGCCAGTTTCTTCCGAAGTGGTAGCC	1979
QY	2023	GGCTCGTGGAGGAAGCTTTTACACCGCGCTTGGCGATCAGTTTCGTGAACTGTTAGTA	2082
Db	1980	GGCTCGTGGAGGAAGCTTTTACACTCACTTGCAGACAGTTTCGTGAACTGTTAGTT	2039
QY	2083	GGGTTGACTTTGTATGGGATGGTGTGAGGGGATTCCTGTTTGTGTGTGGAACATATA	2142
Db	2040	GGGTTGACTATGTGTGGATGGTGTGAGGGGATTCCTGTTTGTGTGTGAGCATATT	2099
QY	2143	AACAACAGTGGGGAGGGTTGGGGCTTGGCCCTCAATGTATTAATTAATGTGGAGCTTGGTAT	2202
Db	2100	AATAATAGTGGGGAGGGTTAGGCCCTTGTCTCAATGTATTAATGTGGAGCTTGGTAT	2159
QY	2203	AATGGATGGAATTTAGAGAGTTTACTCCAGACTTGTGCGCTGCGATGTGTCTCATGAGA	2262
Db	2160	AATGGATGGAAGTTTCGAGAAATTTACTCCAGATTTGGTACGGTGTGTCTCATGTAGA	2219
QY	2263	GGCTCTAACCCATTTTCTGTGTATACTTGTAAAAATGTGCTTACTCTGTGGATTACAA	2322
Db	2220	GGCTCTAAATCCCTTCTGTGTATACTTGTAAAAATGTGCTTACTCTGTGGATTGCA	2279
QY	2323	AGTTTGTAGATTATGAGTAAAAACCACTAACAAATGTGGGAAAGCAGTGCAATTTGC	2382
Db	2280	AGTTTGTGGAATATGAGTAAAAAGTGTGAATGTGGGAAAGTGAATTAATTTGC	2339
QY	2383	CCAGGACGTGTATAAGCAGTTTGTGCAATTTTATGAAAAAGCTACTGGAACAGACTTAGA	2442
Db	2340	TAAGGATGTATAAGCAATTTGTAGAAATTTTATAAAAAAGTTACTGGGACAGACTTAGA	2399
QY	2443	GCTTATTCAAATTTTAAAGACCAATTAACAATTTCTTTAGATAATCTCTTTAGAAAAACC	2502
Db	2400	GCTTATACAAATATAAAGAGATCAATTAACAATTTCTTTAGATAATCTCTTTAGAAAAACC	2459
QY	2503	CTCTTCTTTATTTGACTTGTGCTCGCATTTAAAGTAATCTTAAAGAACTCTCCAGACT	2562
Db	2460	ATCTTCCCTGTTGACTTGTGCTCGTATTTAAAGTAATCTTAAAGAACTCTCCAGACT	2519
QY	2563	ATATAGTCACTATTTTACAGCCATGACATTAATCTGACCAACCCCACTCTTATCATC	2622
Db	2520	ATATAGTCACTATTTTCAAGTCAATGACAGTATCTGACCAACCCCACTCTTATCATC	2579
QY	2623	CAGTAAACAGTAGTACAGAACCTAGAGGAGAAATGCAATTTATCTAGTGAAGCTTACA	2682
Db	2580	CAGTAGCAGTACATACAGAACCTAGAGGAGAAATGCAATTTATCTAGTGAAGCTTACA	2639
QY	2683	CAAGCTGGGCAAGTTAGCATACAATTAACCGGTACTAACTATGTTGGGCTGGCAATGA	2742
Db	2640	CAAGCTGGGCAAGTTAGCATACAATTAACCGGTACTAACTATGTTGGGCTGGCAATGA	2699
QY	2743	GCTAACAGCTGGGCTCGGCAGAAATGCTGTGGAAGTGTGCAAGGATTCATGACTTTAG	2802
Db	2700	GCTAACAGCTGGGCTCGGCAGAAATGCTGTGGAAGTGTGCAAGGATTCATGACTTTAG	2759
QY	2803	GTAATAGCAATTTGGCTAAAGTTGGGAATAAATCTTATACATTTGGACGGTAGCAGATGA	2862
Db	2760	GTAATAGCAATTTGGCTAAAGTTGGGAATAAACCATACTACTTCTTGGACTGTAGCAATGA	2819
QY	2863	AGATTTGTTTAAAAATAAATAAATAAAGCAAGGGTTTCAAGCAACAGCAGTAAAGATTA	2922
Db	2820	GGAACTTTAAAAATAAATAAATAAAGCAAGGGTTTCAAGCAACAGCAGTAAAGATTA	2879
QY	2923	CTTTTACTTTTAAAGGTGACGCTGCCCTGTGGCCCATTTTCAAGGAAGTTTACCGGAAGT	2982
Db	2880	CTTTTACTTTTAAAGGTGACGCTGCCCTGTGGCCCATTTTCAAGGAAGTTTACCGGAAGT	2939
QY	2983	GCCCGGTACAAACGCTCAGAAAAATACCCAGCAGTACTTCAAGTTAACTCTCTCAGAAAGC	3042
Db	2940	TCCCGCATACAAACGCTCAGAAAAAGTACCAACGATGACTTCAAGTTAACTCTCTCAGAAAGC	2999
QY	3043	CAGCACTGGTGCAGGGGGGAGGTAGTAAACCCCTCAAAAAGCATGTGGAGTGAAGGGGC	3102

LFNNVLYHLVENVKLPFGMTTKGKPRDGEPIENVLMKKIPLNVVWCVNIDGY
IDTCISATFRGACHAKPRIITTAINDTSSDAGESSCTGAEWPPNGKGTAKSIFQT
MNNLCENRVFTEDKWLVDNQYTLSSSHSGSQIOGALKALJIKATINLVPTSTEL
LHTDPRQVNCIKDKIKVLLLCQNDPLLVGHVWLKIDKKCKKNTLWFYGFSTGK
TNLAMAIAKSPVYGMVNNNENFPFNDVAGKSLVWDEGIIKSTIVEAAKAILGGOP
TRVDQMRGSAVPVGVVITSNGDITFVSGNTTIVHAKALKERVMKLNFTVRCSF
DMGLJTEADVOQMLTWCNAQSDHYNWAINVTFDFPCGINADALHPDLOTPPIVTDNIS
ISSGSESELESSEFFNLITPGAMNTEPRSTPIPTGSSGSSVGSVPSSVWAA
SWEEAFYPLADQPRELLVGVYVWVGRGLPVCCVQHNNSSGGGLGCHPCINVGAW
YNGWKFREPTDPLVRCSCHVGNPFSVLTKCKAYLSGLQSFVDYE"
2401..4746
/codon_start=1
/product="capsid proteins VP"
/protein_id="CAA92270.1"
/db_xref="GI:1103617"
/db_xref="GOA:O85117"
/db_xref="SPTREMBL:O85117"
/translation="MSKESGKMWSDDKFAKAVYQQVFEYKVTGDTLELIQILKDH
YNIISLDNPLENPSFLDULVARIKNLNKNSPDLYSHHPQSHGQSLSDHPHALSSSSSHAE
PRGDAVLSSDPLHKGQVQLPFTNYVGNELQAGPQSAVDSARLHDPYRYSOL
AKLGINPYTHWADBELKNIKNETGFQAVVKDYFTLKGAAAPVAHFQGSIPYPA
YNASEKPSMTSVNSAASCTGAGGSGNPVMSSEGATFSAHSVCTFSRQPLIIPYD
PEHYKVPSPAASCHNAGKEAKVCTISPTMGYSTPWRYLDFNALNLFPSPLFQHL
IENYGSIPADLTWTISIAVKQVDTKGTGGVQVDTSTIGRLCMLVDHEYKYYPVILGQ
GQDTLAPLPTWVPPQYAYLVTDVNTIGISDSSKLAESSESAFVLEHSSFOLLG
TGSTATSEKYPFPVPEPNELECSQHFYEMNPLYGSLRGLVPDITLGGDPKFRSLTHEDH
ALQFQNFMPGGLVNSVSTKGSQNTGAGKALGLSTGTSQNTRIQLRPGPSQPYVHH
WDDQYVYGINAI SHGQTYTGNAREKEYQGVGRFNEKEOLQOLGANNHYPYNNKG
TQOYTDQIERPLMYGVSNNRRLHYESQLSKIPNLDDSFKTQPALGNGWGLHQPDPQ
IFLKLIPQSGIGIGIKSMGITLVOVAVGIMVTMTFKLGPRAKTAQRMWNPQGVVPPH
AAGHLPVLYDPTADAKQHRHGYEKEPELWTKSRVHPL"

ORIGIN

Query Match 77.3%; Score 3888.4; DB 14; Length 5156;
Best Local Similarity 86.2%; Pred. No. 0;
Matches 4340; Conservative 0; Mismatches 686; Indels 10; Gaps 3;
QY 1 GACGTCAAGAAATGACGTGTCGCCCATCTGTACCGGAAGTCCGCTACCGGC 60
DB 59 GACGTCAAGAAATGACGTGTCGCCCATCTGTACCGGAAGTCCGCTACCGGC 118
QY 61 GCGACCGCGGCATCTGATTTGGTGTCTCTTTTGAATTTGGCGGCTTTTCCCG 120
DB 119 GCGACCGCGGCATCTGATTTGGTGTCTTC-TTTTAAATTTAGCGGCTTTTCCCG 177
QY 121 CCTTATCAATTAAGCGGCATCTTAAATGTTATATTTAAATTAATGACAAACGCT 180
DB 178 CCTTATCAATGCGGCGCATTTTAAATGTTATATTTAAATTTTGGTCACTTTGT 237
QY 181 AACGGTTACTAGGGCGGAGTTACGG-----GCGGTATATAAGCAGCTCGCTTCCCT 232
DB 238 AACGGTTAAATGCGGCGGAGCTAGCGGGGACTACAGTATATATAGCAGCAGCTGCGG 297
QY 233 GACACTTCTTCTGCTGCTTTTGAATGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 292
DB 298 GAGCTCTTCTTCTGCGGCTGCTTTTCTGCTGCTGCTTCTGCTGCTTTTCTGCTGCT 357
QY 293 TAAACAGTATTATATCTACTTTTAAATTTAACTAACTAGGCTATTTCCGGGTGCTTTCG 352
DB 358 TAAACAGTATTATATCTACTTTTAACTAACTAGGCTATTTCCGGGTGCTTCTTACTG 417
QY 353 ACATTTCCTTAACATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 412
DB 418 AAGTTTCTTCTTAAATGTTCTGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 477
QY 413 TAGATACTTCTGACCTGGGACCACTAACCCATCTTAAACAGATTAATGGCAATATATTAA 472
DB 478 TAGACACTTCTGACCTGGGACCACTAACCTTAACTAACTAACTAACTAACTAACTAACT 537
QY 473 GCAGTGTGCTTCTAACTGATTTTACTTGGGGGCGGCTAGCAGGTGCTTACTTTT 532
DB 538 GCAGTGTGCTTCTTAACTGATTTTACTTGGGGGCGGCTAGCAGGTGCTTACTTTT 597

QY 533 TTCAAGTGGAAATTAACAAATTTGAGCAAGGCTATCATATCCATGTAGTATTGGTGGTC 592
DB 598 TTCAAGTGGAAATTAACAAATTTGAGCAAGGCTATCATATTTATGTTGGTATTGGGGGCG 657
QY 593 CAGGACTAATGCTAGAACTTAACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 652
DB 658 CAGGCTTAAACCCAGAAACCTCACAGTGTGTGTAGAGGGGTTATTAAATATGACTTTT 717
QY 653 ACCATCTTGTAACTGAAAGTGTAACTTAAATTTTTCGAGGAGTACTACAAAGGAA 712
DB 718 ATCACTTGTAACTGAAATGTAAAGCTTAAATTTTTCGAGGAGTACTACAAAGGAA 777
QY 713 AATATTTTAGAGTGGAGAGGAGTTTATAGAAAAATTAATTAATGAAAAAATTCCTTTAA 772
DB 778 AATATCTTAGAGTGGAGAGGAGTTTATAGAAAAATTAATTAATGAAAAAATTCCTTTAA 837
QY 773 ATGTTGTGTGTCTTAACAAATTTGAGCGGTATATAGACACCTGTATTTCCGCTCTT 832
DB 838 ATGTTGTATGTTGTGTACTTAATTTGATGATATATAGATACCTGTATTTCTGCTACTT 897
QY 833 TTGCGGAGGAGCTTTGCTCATGCTTAAAGACCCCGCATTTACCAAGCAATTAATGATACTA 892
DB 898 TTAGAAAGGAGGAGCTTTGCCATGCCAAGAAACCCCGCATTTACCAAGCAATTAATGATACTA 957
QY 893 CTAATGAACCTGGGAGTCTAGCTGTGGAGGGGAGATGTTTGTGCCATTTCCGCTGGAAGG 952
DB 958 GTAGTGATGCTGGGAGGCTAGCGGCAAGGGGCGAGAGTTGTGCCATTTTAAATGGAAGG 1017
QY 953 GAACAAAAACCGGGTTAAAGTTTCAAAACCATGTAATTTGGCTATGTGAAAAACAGAGTAT 1012
DB 1018 GAACCTAAGGCTAGCATTAAGTTTCAAACTATGTTAACTGTTGTGTAAGAAACAGAGTAT 1077
QY 1013 TTACTGAAGATAAATGGAATTTAGTGGATTTTAAACCAATATATCTTTTAAAGTAGCAGTC 1072
DB 1078 TTACAGAGGATAAGTGGAACTAGTGTACCTTTTAAACAGTACACTTTTAAAGCAGGCT 1137
QY 1073 ACAGTGGCAGCTTTCAAAATTTCAAGTGCTTAAAGTTAGCTATTTTAAAGCTACTAACT 1132
DB 1138 ACAGTGAAGTTTCAAAATTTCAAGTGCTTAAAGTTAGCTATTTTAAAGCTACTAACT 1197
QY 1133 TAGTACCCACTAGTACATTTCTTGTTCATTTAGAGCTTTGAGCAGGTTTACTTGCATTTAAAG 1192
DB 1198 TAGTGCCTACTAGCACAATTTTATTTGATACAGACTTTGAGCAGGTTTATGTTATTAAG 1257
QY 1193 AAAATAAATAGTAAATTTATTTGCTCAAAACATAGATCTCTTTTGTAGTGGTCAAC 1252
DB 1258 ACATAAATTTGTTAAATTTGTTACTTTTGTCAAAACATAGACCCCTTATTTGGTGGGCG 1317
QY 1253 ATGTTTAAAGTGGATTGCAAAAAATTTGGTAAAAAACAACCCCTGCTGTTTACGGGC 1312
DB 1318 ATGTTTAAAGTGGATTGATAAAAATTTGGCAAGAAAAATACACTGTGTTTATGGGC 1377
QY 1313 CACCAAGTACTGAAAAACAAATTTGGCAATGGCTATTTCTAAAACTGTACAGTGTATG 1372
DB 1378 CGCAAGTACAGAAAAACAACTTTGGCAATGGCCATTTGCTAAAAAGTGTTCAGTATATG 1437
QY 1373 GAATGTGAATTTGGAATAATGAAACTTTTCATTTTAAATGATAGTGGGGAAGTTGG 1432
DB 1438 GCATGTGTAACCTGGAATTAATGAACTTTTCATTTTAAATGATAGCAGAAAAAGCTTTGG 1497
QY 1433 TGGTCTGGGATGAAGCATTTATTAAGTCCACTTTTGTGGAAGCTGCAAAAGCCATTTTAG 1492
DB 1498 TGGTCTGGGATGAAGCATTTATTAAGTCTACAAATTTGTAGAAGCTGCAAAAGCCATTTTAG 1557
QY 1493 GTGGTCAAGCAACAGGCTAGATCAGAAATCGTGGCAGTGTGGCAGTGCCTGGGTGTC 1552
DB 1558 GCGGCAACCCACAGGCTAGATCAGAAATCGTGGGAAGTGTAGCTGTGCTGCGAGTAC 1617
QY 1553 CTGTGGTTATACAGCAATGTGACATTTTGTGAGTGGTGAATATACCACTACAA 1612
DB 1618 CTGTGGTTATACAGCAATGTGACATTTTGTGAGTGGTGAATATACCACTACAA 1677
QY 1613 CTGTGCATGCTAAAGCCTTTAAAGGAAACGATGGTAAAGCTAACTTTTACCATAAGATGA 1672


```
PRGDAVLSSDLHKQGVSVQLPGTNYVCPGNELOAGPPQSAVDSAAIRIHDPYSQL
AKUGINPYTHWTVADSELLKNIKNETGFQAVVVKDYFTLKGAAAPVAHFQSGSLPVPYA
YNASEKPYNSAEASAGAGGQVQVSKMSEGATFSANSVCTCTFSRQPLIYD
PEHYKVFSPALASCHNAGKEAVCTISPMGYSTPMRYLDFNMLNLFSPLEFOHL
IENYGSIPDAALVTTSIELAVKDVTKTGGVOVDTSTGRLCLMVDHEYKYPYVLGO
GQDTLAPELPFWVFPVAYLTVGVNTOGISGDSKLAESAEPVLEHSSFOLLG
TGTATMSYKFPVPENLEGCSSQHYEMNPLYGSELGVDPDLTGLDPPERSLTHEDH
AIQPNMFGPLVNSVSTKEDSSNTGAGKALTGLSTGTSQNTRI SLRPGVSPQVYH
WDYDKVTGINALSHQGTGYNAEDKEYQQGVGRFPNEKEQLKQLGLNMHTYFPNKG
TQYTDQIERPLMVGSMNRRLAHYESQLSKIPNLDSDSFKTQFALGLGWLHQPPO
IFLKLIPQSGPIIGIKSMGITLVOVAVGIMVTMTFKLGPRTKATGRWNPQGVYPPH
AAGHLPVLYDPTATDAKQHRHGYEKPEBELWAKSRVHPL"
2874..3119
/codon_start=1
/product="protein x"
/protein_id="AA091880.1"
/db_xref="GI:37499714"
/translation="MDSYLTPMPHPVAVMQLSEKMQYLLVKTYSLGLKLYNYPV
LTMGLAMSYKLGPRKVLTLVQGFMTLGLIANLWSWE"
3305..4969
/gene="VP2"
3305..4969
/gene="VP2"
/notes="major capsid protein"
/codon_start=1
/product="capsid protein 2"
/protein_id="AA091880.1"
/db_xref="GI:37499711"
/translation="MVSNSAEASTGAGGGGSPVKSMSEGAFTFSANSVCTFSRQF
LIPDEHYKVFSPASCHNAGKEAVCTISPMGYSTPMRYLDFNMLNLFSPLE
EPHLLNENTGAPDALVTTSIELAVKDVTKTGGVOVDTSTGRLCLMVDHEYKYP
YVLGOQDTLAPELPFWVFPVAYLTVGVNTOGISGDSKLAESAEPVLEHSS
FOLLGTTATMSYKFPVPENLEGCSSQHYEMNPLYGSELGVDPDLTGLDPPERSL
THEDHAIQPNMFGPLVNSVSTKEDSSNTGAGKALTGLSTGTSQNTRI SLRPGVPS
OPVHMDTKYVTGINALSHQGTGYNAEDKEYQQGVGRFPNEKEQLKQLGLNMHTY
FENKGTQDTLERELMGSVMNRRLAHYESQLSKIPNLDSDSFKTQFALGLGWLH
QPQPIIKLIPQSGPIIGIKSMGITLVOVAVGIMVTMTFKLGPRTKATGRWNPQGV
VYPPHAAAGHLPVLYDPTATDAKQHRHGYEKPEBELWAKSRVHPL"
4890..5174
/codon_start=1
/product="11 kDa protein"
/protein_id="AA091881.1"
/db_xref="GI:37499712"
/translation="MQNNTDMDMSLKNGQPKAVCTHCKHSPPCPQPCVKTRPPV
PPRLYLPPIPIQPNTKIDINVEFKYLTRYEQHVIRMLRLCNMYQNLK"
ORIGIN
Query Match 77.1%; Score 3875.6; DB 14; Length 5596;
Best Local Similarity 86.0%; Pred. No. 0;
Matches 4332; Conservative 0; Mismatches 694; Indels 10; Gaps 3;
QY 1 GAGGTACAGGAATGACGTAACTGTCGCGCATCTGTACCGGAAGTCCGCGCTACCGGC 60
DB 282 GAGGTACAGGAATGACGTAACTGTCGCGCATCTGTACCGGAAGTCCGCGCTACCGGC 341
QY 61 GCGACCGCGCGCATCTGATTTGGTGTCTCTTTTGAATTTTGGCGGCTTTTCCCG 120
DB 342 GCGACCGCGCGCATCTGATTTGGTGTCTCTCTTTTGAATTTTGGCGGCTTTTCCCG 400
QY 121 CCTTATGCAATTAAGCGGCGCATGTTTAATGTATATATTTTAATTTAATGACAAACGCCT 180
DB 401 CCTTATGCAATTAAGCGGCGCATGTTTAATGTATATATTTTAATTTTGTGTCAGTTTGT 460
QY 181 AACGGTTACTAGGCGCGGAGTACGG-----GGGTATATAAGCAGCTGCGTCCCT 232
DB 461 AACGGTTAAAATGGCGCGGAGCGGTAGCGGGGACATACAGTATATATAGCAGCAGCTGCCG 520
QY 233 GACACTTTCTTTCTGTTGCTTTTGAAGTCACTGCTGCTTTCTTTGCTGCTGCTAAG 292
DB 521 CAGCTCTTTCTTCTGGGCTGCTTTTCTGCTGCTTTCTGCTGCTTTTGTGAGCTAAC 580
QY 293 TAAACAGGTATTTATACCTTTTAAATTTAATTAACATGAGAGCTATTTTGGGGTGTCTTGC 352
|||||
```

```
DB 581 TAAACAGGTATTTATCTACTCTGTTTAAATACTAAACATGAGAGCTATTTAGAGGGGTGCTTC 640
QY 353 ACATTTCTCTCTAACATTTCTGGACTGTGCTAAATGATAAAGTGGTGGTCTCTATCTAGACT 412
DB 641 AAGTTCTTCTCTAAATGTTCTGGACTGTGCTAAACGATAAAGTGGTGGTCTCTTACTAGATT 700
QY 413 TAGATACTTCTGACTGGGAACCACTAACCCATTTCTTAACAGATTAATGGCAATATATTTAA 472
DB 701 TAGACACTTCTGACTGGGAACCACTAACTCATCTAACACAGACTAATGGCAATATACTTAA 760
QY 473 GCAGTGTCTCTCTCTAACTTTGATTTTACCTGGGGGGCGCTAGCAGGTGTGCTTATCTTTT 532
DB 761 GCAGTGTCTCTCTCTAACTTTGATTTTACCTGGGGGGCGCTAGCAGGTGTGCTTATCTTT 820
QY 533 TTCAGGTGGAATGTAAACAAATTTGAGGAAGGCTATCATATCCATGTAGTATTTGGTGGTC 592
DB 821 TTCAACAGCAATGTAAACAAATTTGAAGAGGCTATCATATTCATGTGGTATTTGGGGGGC 880
QY 593 CAGGACTAATGTGTAGAACTTAACTGTGTGGTGTAGAGGTTTATTAATATATGTTCTTT 652
DB 881 CAGGGTTAAACCCACAGAACTTCACTGAGTGTGTAGAGGGTTTATTTAATAATGTACTTT 940
QY 653 ACCATCTCTGACTGAAAGTGTAACTTAAATTTTTCAGGAGTACTACCAAGGAA 712
DB 941 ATCACTTTGTAATGAAATGTGAAGCTAAATTTTTCAGGAGTACTACCAAGGAA 1000
QY 713 AATATTTTAGAGATGAGAGCAGTGTATAGAAAATTTACTTAAATGAAAAATTTCTTTTAA 772
DB 1001 AATCTTTTAGAGATGAGAGCAGTGTATAGAAAATTTATTAATGAAAAATTTCTTTTAA 1060
QY 773 ATGTTGTGGTGTGTAACAAATTTTTCAGGAGTATATAGACACTGTATTTTCGCTCTTT 832
DB 1061 ATGTTGTATGGTGTGTACTAATATTTGATGATATATAGATACCTGTATTTCTGCTACTT 1120
QY 833 TTCGGCGAGAGCTTGTCTATGCTTAAAGACCCGCGATTTCTGTCATTTTCGCTGGAAGG 892
DB 1121 TTAGAGGGGAGCTTGCCTATGCTCAAGAAACCCGCGATTTACCAAGCAATTAATGATACTA 1180
QY 893 CTAATGAAACTGGGAGTCTAGCTGTGGAGGGGAGATGTGTGTCATTTTCGCTGGAAGG 952
DB 1181 GTAGCGATCTGGGAGTCTAGGGGCACAGGGGAGAGGTGTGTCATTTAATGGGAGG 1240
QY 953 GAAACAAACGGGGTTTAAAGTTTCAACCATGTGTAATTTGGCTATGTGTAACACAGAGTAT 1012
DB 1241 GAACTAAGCTAGCATATAAGTTTCAAACTATGTTAACTGGTGTGTGTAACACAGAGTGT 1300
QY 1013 TTACTGGAAGATAATGGAATTTAGTGGATTTTAAACCAATATATCTTTTAAAGTAGCAGTC 1072
DB 1301 TTACAGAGATAAGTGGAAACTAGTGTACTTTTAAACAGTACACTTTTACTAAGCAGTAGTC 1360
QY 1073 ACAGTGGCAGCTTTCAAAATTTCAAGGTCCCTTAAAGTTAGCTATTTTATAAGCTTACTAACT 1132
DB 1361 ACAGTGGAGTTTTCAAATTTCAAGTGCATTAAGTACGAATTTTATAAGCACTAATTT 1420
QY 1133 TAGTACCCACTAGTACATTTCTTTTACATTCAGACTTTGAGCAGGTTCCTTGCATTTAAAG 1192
DB 1421 TAGTGCCTACTAGCACATTTTATTGCTATACAGACTTTGAGCAGGTTCCTTGCATTTAAAG 1480
QY 1193 AAAATAAATAGTAAATTTTATTGTGTCAAACTATGATCTCTTTTGTAGTGGTCAAC 1252
DB 1481 ACAATAAATTTGTTAAATTTTACTTTGTTCAAACCTATGACCCCTTATTTGGTGGGCGAG 1540
QY 1253 ATGTGTTAAGTGTGATTTGACAAAATAATGTTGTAATAAAAAACCCCTGTGTTTACGGGC 1312
DB 1541 ATGTGTTAAGTGTGATTTGATAAATAATGTTGACAGAAAATAACACTGTGTTTATGGGC 1600
QY 1313 CACCAAGTACTGGAAAAACAAATTTTGGCAATGGCTATTTGCTAAAACTGTACCAAGTATG 1372
DB 1601 CGCAAGTACAGAAAAACAACTTTGGCAATGGCCATTTGCTAAAAAGTGTTCAGTATATG 1660
QY 1373 GAATGTTGAATTTGGAATAATGAAAACTTTCCATTTAATGATGTAGCGGGGAAAGTTTGG 1432
DB 1661 GCATGTTTAACTGGAAATAATGAAAACTTTCCATTTAATGATGTAGCAGGAAAGCTTGG 1720
|||||
```



```
Db 3881 |||||AACACACAGGAATTTCTGGAGACGCAAAATATTAGCAAGTGAAGATTCAGCATTTTAT 3940
QY 3653 GTGTTAGAGCACAGTTTCATTGAACTTTTGGGTACAGGGGGATCTGCCACTATGTCCTAC 3712
Db 3941 GTTTTGGACACAGTTCTTTTTCAGCTTTTAGGTACAGGAGGTACACCACTATGCTTAT 4000
QY 3713 AAATTTCCAGCTGTGCCCCCAGAAAAACCTAGAAAGGTGCGAGCAACATTTTATGAATG 3772
Db 4001 AAGTTTCTCCAGTGGCCCCCAGAAAAATTTAGAGGGCTGCACTCAACACATTTTATGAGATG 4060
QY 3773 TACAACCTTTTGTACGGTTCTGTTTAGGGGTACCTGACACATTAGAGGGGACCCCTAA 3832
Db 4061 TACAATCCCTTATACCGGATCCCGCTTAGGGGTTCTTGACACATTAGAGGGTACCCAAA 4120
QY 3833 TTTAGATCATTTGACACGAAAGACCACTGCAATTCAGCCACAAATTTTATGCTGGGCCA 3892
Db 4121 TTTAGATCTTTAACAATGAGACATGAGACCATGCAATTCAGCCCCAATCTTCATGCCAGGCCA 4180
QY 3893 CTAAATAATTCAGTGTCTACCAAGAGGAGACAATTTCTAATACAGGTGCTGGAAGGCC 3952
Db 4181 CTAGTAAACTCAGTGTCTACAAAGGAGGAGACAGCTCTAATACTGGAGCTGGGAAAGCC 4240
QY 3953 CTTACGGGGCTTAGTACTGGCACTAGCCAAACACCAAGATTTCCCTACGCCCGCGGCCA 4012
Db 4241 TTAACAGGGCTTAGACAGGTACTCTCTCAAAACACTAGAAATATCTTACGCCCGGGGCCA 4300
QY 4013 GTATCTCAGCATPACCATCACTGGGACACTGATAAATATGTTACAGGAATAAATGCCATT 4072
Db 4301 GTGTCTCAGCGTACCACACTGGGACACAGATAAATATGTTACAGGAATAAATGCTATT 4360
QY 4073 TCATATGAGCAAAACCACTTATGAAATGCTGAGGACAAAGAGTATCAGCAAGGGGTAGGA 4132
Db 4361 TCTCATGCTCAGACCACTTATGTAACGCTGAAGACAAAGAGTATCAGCAAGGGGTGCT 4420
QY 4133 AGATTTCCAAATGAAGAAAGAACAGCTTAAAGCAGTTACAGGTTCTTAAATGACACATAC 4192
Db 4421 AGATTTCCAAATGAAGAAAGAACAGCTTAAAGCAGTTACAGGTTCTTAAATGACACATAC 4480
QY 4193 TTCCCTTAATAAGGAAACCAACAAATACACAGACCAAAATGAACGCCCTCTTATGGTGGC 4252
Db 4481 TTTCCCAATGAAGAAACCAACAAATATACAGATCAAAATGAGCGCCCTTAATGGTGGT 4540
QY 4253 TCTGTTTGAACAGAGAGCTTCTACTATGAAGTCAAGTGTGGAGTAAATCCCTAAC 4312
Db 4541 TCTGTATGAACAGAGAGCCCTTCACTATGAAGCCAGCTGTGGAGTAAATTCCAAT 4600
QY 4313 TTAGATGACAGTTTAAACTCAATTTGACCCCTAGCGGGTGGGGTTGCAATCAACCA 4372
Db 4601 TTAGATGACAGTTTAAACTCAAGTTTGCAGCCCTTAGAGGATGGGGTTTGCATCAGCCA 4660
QY 4373 CCCCCTCAAAATTTTAAATACTACCAAAAGTGGGCCAATTCGAGGTATTAATCC 4432
Db 4661 CTTCTCAAAATTTTAAATAATTTACCAAAAGTGGGCCAATTCGAGGTATTAATCA 4720
QY 4433 ATGGGAATTACTACTTTAGTTCAATATGCTGTGGGAATTAATGACAGTTACCATGACCTTT 4492
Db 4721 ATGGGAATTACTACTTTAGTTCAATATGCTGTGGGAATTAATGACAGTTACCATGACATTT 4780
QY 4493 AAATTTGGGACCTCGAAAGGCTACTGGAAGTGAATCCCGAGCCTGGCGTTTATCTCCT 4552
Db 4781 AAATTTGGGACCTCGTAAAGCTACGGGACCGTGAATCTCAACCTGGAGTATATCCCGG 4840
QY 4553 CATGACGCTGCTCATTTACCATATGACTATGATGACCCACACAGTACAGATGCAAGCAA 4612
Db 4841 CAGCAGCAGGTCATTTTACCATATGATATATATGACCTTACAGTACAGATGCAAGCAA 4900
QY 4613 CACCACAGACCGGATATGAAGAGCTGAAGAAATTTGGGACTCCCAAAAGCCGTGTGCAC 4672
Db 4901 CACCACAGACATGATATGAAGAGCTGAAGAAATTTGGGACACCCAAAGCCGTGTGCAC 4960
QY 4673 CCATTTGAACATTTCCCAACCGTGTCTCAGCCAGGAACCGTCAACCCACCGCCCACTGT 4732
|||||
```

```
Db 4961 CCAATTGTAAACACTCCCAACCGTGCCCTCAGCCAGGATCGGTAACTAAACGCCCACT 5020
QY 4733 GCCGCCAGATATATGTGCCCCCTCCCAATACCCCGTAGCAACCACTCTATATAAGATAC 4792
Db 5021 ACCACCCAGCTGTACCTGCCCTCTCTATACCTATAGACAGCCCTAAACAAAAGATAT 5080
QY 4793 AGACGCTGTAGAAATATAATTAATTAATCTAGATATGAACAAATGTAATTAATGATGCTAG 4852
Db 5081 AGACAATGTAGAAATTAAGTATTTAACCCAGATATGAACAAATGTTATTAGAAATGTTAAG 5140
QY 4853 ATTATGTAATGTACACAAAGTTTCGAAAAATAAAGCCCTTAAATAAATAATTCATAGTG 4912
Db 5141 ATTGTGTAATGTATCAAAATTTAGAAAAATAAAGCTTTGTTGTTGTTGTTGTTGTTGTTG 5200
QY 4913 TATGGTCTTTAAAAATTTCAAAAAAGACACCAAAATCAGATGCCCGCGTCCGCCCG 4972
Db 5201 T-TGTTGCGCTTTAAAAATTTAAAGAGACACCAAAATCAGATGCCCGCGTCCGCCCG 5259
QY 4973 GTAGCGGAGCTTCGCGTACAAAGTGGCGGACAGTTACGTCAATTTCTCTGTAGCTC 5028
Db 5260 GTAGCGGAGCTTCGCGTACAAAGTGGCGGACAAATTAACGTCAATTTCTCTGTAGCTC 5315

RESULT 10
AF162273
LOCUS Erythrovirus B19 strain HV, complete genome.
DEFINITION AF162273
ACCESSION AF162273
VERSION AF162273.1 GI:5670171
KEYWORDS
SOURCE
ORGANISM B19 virus
Virus; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
AUTHORS Gallinella, G. and Venturoli, S.
TITLE B19 Genome Sequence and Structure Analysis
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 5594)
AUTHORS Gallinella, G. and Venturoli, S.
TITLE Direct Submission
JOURNAL Submitted (23-JUN-1999) Clinical and Experimental Medicine -
Division of Microbiology, University of Bologna, Via Massarenti, 9,
Bologna I-40138, Italy
FEATURES
source
1..5594
/organism="B19 virus"
/mol_type="genomic DNA"
/strain="HV"
/db_xref="taxon:10798"
1..382
/note="5' hairpin; left ITR; flop sequence orientation"
stem_loop
615..2630
/gene="ns"
615..2630
/gene="ns"
/codon_start=1
/product="non-structural protein"
/protein_id="AAD4613.1"
/db_xref="GI:5670172"
/translation="MELFRGLVQVSNVLDCAANDNWCSLDLDLDTSDWELPLTHNRLM
AIVLSSVASKLDFTGGVPLAGCLYFPQVCKNFEQYHIVVIGGFLNPRNITVCVBG
LFINVYHLVTENVKLPGLMGTGKYPDGEQFIENYLMKKIPLNVVVCVTNIDGY
IDTCLSATPRGACHAKPRITTAINDTSSDAGESGGAELVVPVNGKTKASIKFTD
MYNLCENRVFTEDKWLVDNQYTLTSSSHSGSPQIQSLKALILYKATNLYPTSTPL
LHTDFEQVNCIKDKILKLLCQNTDPLLVGQHLVKWIDKKCKKNTLWFYGFPSGK
TNLMAIAKSPVYGVVNMNNENPFNDVAGSLVWVDEGIITKSTIVEAKAILGGQP
TRVDMKRGSAVPGVPTVNSGDIITFVSGNTTTTHAKALERMVKNLITVRCSP
DMLGLTEADVOQLTWCAQSDHYENWAINYTFDPPGINADALHPLDCTTPIVTS
ISSSGSESSELSSEFFNLTPGAWNTETPESSTPICTSSGESFVSGSVSEVVA
SHEEAFYPLADOFRELLVGVYWDVGRGLPVCCVQHINNNGGGLGLCPHCLNVGAM
YNGWKFRTPTDPLVRCSHVGASNPFSVLTKCKAYLSGLQSFVDYE"
2623..4968
gene
```


Db 1780 GCGGCAACCCACAGGGTAGATCAAAAATGCGTGAAGTAGCTGCGCTGGAGTAC 1839
QY 1553 CTGTGGTTATAACAGCAATGGTGCACATTACATTTGTTGAGTGGTAATPACCACTACAA 1612
Db 1840 CTGTGGTTATAACAGCAATGGTGCACATTACATTTGTTGTAAGGGGAACACTACAACAA 1899
QY 1613 CTGTGCATGTAAAGCTTAAAGGAAACGGAATGTAAGCTAACTTTTACCATTAAGATGA 1672
Db 1900 CTGTACATGTCTAAAGCCTTAAAGAGAGCAATGGTAAAGTTAAACTTTTACTGTAAAGATGA 1959
QY 1673 GCCTGACATGGTGTACTTACAGAGGCTGATGTACAACATGGCTAACTTGTGTAAAG 1732
Db 1960 GCCTGACATGGGTTACTTAACAGAGCTGATGTACAACAGTGGCTTACATGGTGTAAAG 2019
QY 1733 CACAAAGCTGGAGCCACTATGAATACTGGGCAATAAAGTACACATTTGATTTCCCTGGAA 1792
Db 2020 CACAAAGCTGGAGCCACTATGAATACTGGGCAATAAAGTACACATTTGATTTCCCTGGAA 2079
QY 1793 TAAATGCAGATGCCCTCCACCCAGATCTCCAAACCCACCCCAATGTGCCAGACACCACTA 1852
Db 2080 TTAATGCAGATGCCCTCCACCCAGATCTCCAAACCCACCCCAATGTGTACAGACACCACTA 2139
QY 1853 TCAGCAGCAGTGTGTGAAGCTCTGAAGAACTCTGAAGAACTCTGAAGAACTCTGAAGAACTCT 2199
Db 2140 TCAGCAGCAGTGTGTGAAGCTCTGAAGAACTCTGAAGAACTCTGAAGAACTCTGAAGAACTCT 2199
QY 1913 TCACCTCCAGGCGCTGGACAGTGAACCCCGCGCTCTAGTAGCGCGCTCCCGGAGCA 1972
Db 2200 TCACCCAGGCGCTGGACACCTGAACCCCGCGCTCTAGTAGCGCGCTCCCGGAGCA 2259
QY 1973 GTTCAGGAGAAATCATTTGTGCGAAGCCAGTTTCTCCGAGAGTGTAGCGCGCTCGTGGG 2032
Db 2260 GTTCAGGAGAAATCATTTGTGCGAAGCTCAGTTTCTCCGAGAGTGTAGCGCGCTCGTGGG 2319
QY 2033 AGAAGCTTTTACAGCGCGCTTCCGATCAGTTTCTGTAACCTGTTAGTAGGGGTTGACT 2092
Db 2320 AGAAGCTTTTACAGCGCGCTTCCGATCAGTTTCTGTAACCTGTTAGTTGGGGTTGACT 2379
QY 2093 TTCTATGGAGTGTGTGAGGGGATGCTGCTGTTGCTGTGGAAATATATAACACAGTG 2152
Db 2380 ATGTGTGGAGCGGTGAAGGGGTTTACCTGTGTGTGTGTGTAACATATTAACATAGTG 2439
QY 2153 GGGAGGGTTGGGCTTTGCGCTCATTTGTAATTAATGTGGAGCTTGGTATAATGGATGA 2212
Db 2440 GGGAGGGTTGGGCTTTGCGCTCATTTGTAATTAATGTGGAGCTTGGTATAATGGATGA 2499
QY 2213 AATTTAGAGTTTACTCCAGACTTGTGCGCTGCGAGTTGTCAATGTAGGAGCTCTAAAC 2272
Db 2500 AATTTAGAGTTTACTCCAGACTTGTGCGCTGCGAGTTGTCAATGTAGGAGCTCTAAAC 2559
QY 2273 CATTTTCTGTGTTAACTTGTAAATAATGCTTACCTGCTGCTGATTTACAAAGTTTGTAG 2332
Db 2560 CCTTTTCTGTGCTAACTGCTGAAATAATGCTTACCTGCTGCTGATTTGCAAGCTTTGTAG 2619
QY 2333 ATTTAGGTAAACCACTAAACAAATGGTGGAAAGCAGTGCACAAATTTGCCAGGACGTG 2392
Db 2620 ATTTAGGTAAACCACTAAACAAATGGTGGAAAGTGCATGATTAATTTGCTAAAGCTGTG 2679
QY 2393 TATAAGCAGTTTGTGCAATTTTATGAATAAGCTACTGGAACAGACTTAGAGCTTATTCAA 2452
Db 2680 TATCAGCAATTTGTGGAAATTTATGAATAAGGTTACTGGAAACAGACTTAGAGCTTATTCAA 2739
QY 2453 ATTTTAAAGACCATTAACAACTTCTTTAGATAATCTTTAGAAACCCCTCTCTTTA 2512
Db 2740 ATATTAAAGATCACTATATAATTTCTTTAGATAATCTTTAGAAACCCCTCTCTCTG 2799
QY 2513 TTTGACTTAGTGTGCTGCTAAAGAAATCTTAAAGAACTCTCCAGACCTATATAGTCAAT 2572
Db 2800 TTTGACTTAGTGTGCTGCTAAAGAAATCTTAAAGAACTCTCCAGACTTATATAGTCAAT 2859
QY 2573 CATTTTACAGCCATGACAGTTTATCTGACCAACCCCATGCCCTTATCTCCAGTAAACAGT 2632

Db 2860 CATTTTCAAAGTCATGGAACAGTTTATCTGACACACCCCATGCTTATCATCTCCAGTAGCAGT 2919
QY 2633 AGTGCAAGAACCTAGAGGAGAAAATGAGTATTATCTAGTCAAGACTTTACACAAAGCCTGGG 2692
Db 2920 CATGCAAGAACCTAGAGGAGAAAATGAGTATTATCTAGTGAAGACTTTACAAAGCCTGGG 2979
QY 2693 CAAAGTTAGCATACAAATTAACCCGGTACTAATATGTTGGGCTTGGCAATGAGCTACAAGCT 2752
Db 2980 CAAAGTTAGGCTACAATACCCGGTACTAATATGTTGGGCTTGGCAATGAGCTACAAGCT 3039
QY 2753 GGGCTCTCCAGATGCTGTCGACAGTGTGCAAGGATTTCAAGGATTTCAAGGATTTAGGTATAGCCAA 2812
Db 3040 GGGCTCTCCAGATGCTGTCGACAGTGTGCAAGGATTTCAAGGATTTAGGTATAGCCAA 3099
QY 2813 TTGGCTAAAGTTGGGAAATAATCTTATACATGTCGACGCTGTCGACGATTTAGGTATAGCCAA 2872
Db 3100 CTGGCTAAAGTTGGGAAATAATCCATATCTCATTTGGACTGTAGCAGATGAAGACTTTTA 3159
QY 2873 AAAAATATAAAAATGAACACAGGGTTTCAAGCAACAGCAGTAAAGATTTACTTTTACTTTA 2932
Db 3160 AAAAATATAAAAATGAACACAGGGTTTCAAGCAACAGTAAAGATTTACTTTTACTTTA 3219
QY 2933 AAAGGTGACGCTGCGCTGTCGACGATGCTTCAAGGAGTTTACCGGAGTGTCCCGCTTAC 2992
Db 3220 AAAGGTGACGCTGCGCTGTCGACGATGCTTCAAGGAGTTTACCGGAGTGTCCCGCTTAC 3279
QY 2993 AACGCTCAGAAAAATPACCCAGCAGTACTTCAAGTAACTCTGTCGACAAAGCAGCAGTGT 3052
Db 3280 AACGCTCAGAAAAATPACCCAGCAGTACTTCAAGTAACTCTGTCGACAAAGCAGCAGTGT 3339
QY 3053 GCAGGCGGGAGGTAGCAACCCCTCAAAAAAGCATGTGAGTGAAGGGGCTACATTTACT 3112
Db 3340 GCAGGAGGGGTGGCAGTAACTCTGTCAAAAAGCATGTGAGTGAAGGGGCTACATTTACT 3399
QY 3113 GCTAATCTGTAACGCTGATCTCTAGGCAATTTTAACTTCCATATGATCCAGAGCAT 3172
Db 3400 GCAACTCTGTAACCTGTAATTTTCCAGCAGTGTTCCTTATGACCCAGAGCAC 3459
QY 3173 CATTTAAAGTGTCTCTCCAGCAGTACTAGTGCACAAATGCTAGTGGGAAAGAGGCA 3232
Db 3460 CATTTAAAGTGTCTCTCCAGCAGCAGCAGTGCACAAATGCTAGTGGGAAAGAGGCA 3519
QY 3233 AAAGTGTGCACTATTAGTCCCATTTAGGGTACTCTACTCCGTTGGAGATCTTTAGATTTT 3292
Db 3520 AAAGTGTGCACTATTAGTCCCATTTAGGGTACTCTACTCCGTTGGAGATTTAGATTTT 3579
QY 3293 AATGCTTTAAATTTGTTTTTCTCACTTAGAGTTTTCAGCACTTAAATGAAATTTAGT 3352
Db 3580 AATGCTTTAAATTTGTTTTTCTCACTTAGAGTTTTCAGCACTTAAATGAAATTTAGT 3639
QY 3353 AGTATAGCTCCAGATGCTTTAACTGTAACTATTTCAGAAATGCTGTAAAGATGTACA 3412
Db 3640 AGTATAGCTCCAGATGCTTTAACTGTAACTATTTCAGAAATGCTGTAAAGATGTACA 3699
QY 3413 GACAAACAGGAGGGTGTCAAGTTACTGACAGCAACAGCAGCTTTGTGTATGTTA 3472
Db 3700 GACAAACAGGAGGGGTGTCAAGTTACTGACAGCACTACAGGGGCTTATCCATGTTA 3759
QY 3473 GTGGATCATGAGTATATAATACCATATGCTAGGTACAGGCAACAGCAGTACTAGTCCA 3532
Db 3760 GTAGACCATGAATACAGTACCCTATGTTGTAGGCAAGGTACAGGATTTAGGCCCCA 3619
QY 3533 GAACTGCCCATTTGGGTTTACTTTTCCCGCCAGTATGCTTACTTAAACAGTGGTGAAGTA 3592
Db 3820 GAACTTCTTTTGGGTATCTTTTCCCGCTCAATATGCTTACTTAAACAGTGGAGATGTT 3879
QY 3593 AACAACAAGGAATTTACAGGACAGCAAAAAATTTGGCTAGTGAAGAAATCAGCTTTTAT 3652
Db 3880 AACAACAAGGAATTTCTGAGACAGCAAAAAATTTAGCAAGTGAAGAAATCAGCTTTTAT 3939
QY 3653 GTGTTAGACACAGTTCATTTGAACTTTTGGGTACAGGGGGATCTGCCACTATGCTCTAC 3712
Db 3940 GTTTTGGAAACAGATTTCTTTTTCAGCTTTTGGGTACAGGAGGTACAGCAACATGCTTAT 3999

Db 2555 ATATTAAAGATCAATTATAATATTTCTTTAGATCATCCCTAGAAAACCCATCCTCTCTG 2614
QY TTTGACTTGTAGTCTCGCATTTAAAGTAATCTTTAAATCTCTCCAGACTATATAGTCAT 2572
Db 2615 TTTAACTTGTAGTCTCGCATTTAAAGTAATCTTTAAATCTCTCCAGACTATATAGTCAT 2674
QY CATTTTCAGAGCCATGGACAGTTATCTGACACCCCTGCTTATCATCCAGTAAACAGT 2632
Db 2675 CATTTTCAGAGCCATGGACAGTTATCTGACACCCCTGCTTATCATCCAGTAAACAGT 2734
QY AGTCAGAGCCATGGAGGAGAAATCAGTATTTATCTAGTGAAGACTTTACACAGCCCTGGG 2692
Db 2735 CATGAGAGCCATGGAGGAGAAATCAGTATTTATCTAGTGAAGACTTTACACAGCCCTGGG 2794
QY CAAGTTAGCATCAATTAACCCGGTACTAACTATGTTGGGCTGCAATGAGCTACAAGCT 2752
Db 2795 CAAGTTAGCATCAATTAACCCGGTACTAACTATGTTGGGCTGCAATGAGCTACAAGCT 2854
QY GGGCTCCGAGATGCTGTGGAAGTCTGCAAGGATTCATGACTTTAGGTATAGCCAA 2812
Db 2855 GGGCTCCGAGATGCTGTGGAAGTCTGCAAGGATTCATGACTTTAGGTATAGCCAA 2914
QY TTGGCTAAGTTGGGAATAAATCTTTATACATTTGAGGCTGCAATGAGCTACAAGCT 2872
Db 2915 CTGGCTAAGTTGGGAATAAATCTTTATACATTTGAGGCTGCAATGAGCTACAAGCT 2974
QY AAAAATATAAATAAAGAGGTTTCAAGCAACAGCAGTAAAGATTAATTTACTTTTA 2932
Db 2975 AAAAATATAAATAAAGAGGTTTCAAGCAACAGCAGTAAAGATTAATTTACTTTTA 3034
QY AAAGTGCAGCTGCCCTGCGCCATTTTCAAGCAACAGCAGTAAAGATTAATTTACTTTTA 2992
Db 3035 AAAGTGCAGCTGCCCTGCGCCATTTTCAAGCAACAGCAGTAAAGATTAATTTACTTTTA 3094
QY AACGCTCAGAAAATACCCAGCATGACTTCAAGTAACTCTGCAAGCAGCAGCTGCT 3052
Db 3095 AACGCTCAGAAAATACCCAGCATGACTTCAAGTAACTCTGCAAGCAGCAGCTGCT 3154
QY GCAGGCGGGGGGTAGCAACCTTCAAAAGCATGTGAGTGAAGGCTCATTTACT 3112
Db 3155 GCAGGCGGGGGGTAGCAACCTTCAAAAGCATGTGAGTGAAGGCTCATTTACT 3214
QY GCTAATCTGTAACTGTATCTCTAGGCAATTTTAAATCTCATATGATCCAGCAT 3172
Db 3215 GCCAATCTGTAACTGTATCTCTAGGCAATTTTAAATCTCATATGATCCAGCAT 3274
QY CATTTATAAGTGTCTCTCAGCAGCTATGATGCTGCAACATGCTAGTGGGAAAGGCA 3232
Db 3275 CATTTATAAGTGTCTCTCAGCAGCTATGATGCTGCAACATGCTAGTGGGAAAGGCA 3334
QY AAAGTGTGCACTATTAGTCCCATTTATGGGGTACTCTACTCGTGGAGATCTTAGATTTT 3292
Db 3335 AAGTTTGCACCATTTAGTCCCATTTATGGGGTACTCTACTCGTGGAGATCTTAGATTTT 3394
QY AATGCTTTAAATTTGTTTCTCAATTTAGTGTGCTGCACTTAAATGAAATTTATGTT 3352
Db 3395 AATGCTTTAAATTTGTTTCTCAATTTAGTGTGCTGCACTTAAATGAAATTTATGTT 3454
QY AGTATAGCTCCAGATGCTTTAACTGTAATTTTCAAGAAATGCTGTAAGAAATGGA 3412
Db 3455 AGTATAGCTCCAGATGCTTTAACTGTAATTTTCAAGAAATGCTGTAAGAAATGGA 3514
QY GACAAAACAGGAGGAGTGTGCAAGTTACTGACAGCACCAGGACGTTTGTGTATGTTA 3472
Db 3515 GACAAAACAGGAGGAGGAGTGTGCAAGTTACTGACAGCACCAGGACGTTTGTGTATGTTA 3574
QY GTGGATCATGATTAATATCCATATGCTAGTGTAGGGAACAAGACACATAGCTCCA 3532
Db 3575 GTAGACCATGATTAATATCCATATGCTAGTGTAGGGAACAAGACACATAGCTCCA 3634
QY GAACTGCCCATTTGGGTTTACTTTCCCGCCAGTATGCTTAAACAGTAGGTGAGTA 3592

Db 3635 GAACTTTCTATTGGGTATATCTTTCCCTCAATATGCTTACTTAAACAGTGGGAGTGC 3694
QY AACACACAAGGAATTTTTCAGAGACACAAAATTTGGCTAGTGAAGAAATCAGCTTTTAT 3652
Db 3695 AACACACAAGGAATTTTTCAGAGACACAAAATTTAGCAAGTGAAGAAATCAGCTTTTAT 3754
QY GTGTTAGACACAGTTCATTTGAACTTTTGGGTACAGGGGGATCTGCCACTATGCTTAC 3712
Db 3755 GTTTTGGAAACACAGTTCCTTTTTCAGCTTTTGGTACAGGAGGTACAGCACTATGCTTAT 3814
QY AAATTTCCAGCTGTGCCCCCAGAAAACCTAGAAAGCTGAGCCAAATTTTATGAAATG 3772
Db 3815 AGTTTCTTCCAGTGTGCCCCCAGAAAATTTAGAGGGCTGAGCTCAACACTTTTATGAAATG 3874
QY TACAACCTTTTGTACGGTTTCTGTTTGGGTACCTGACATATAGGAGGGGACCTTAA 3832
Db 3875 TACAATCCCTTATACGGATCCGCTTGGGTCTCTGACATATAGGAGGTGACCCAAA 3934
QY TTTAGATCATTTGACACAGAGACACCGCAATTTAGCCACAAAATTTTATGCCAGGGCCA 3892
Db 3935 TTTAGATCATTTGACACAGAGACACCGCAATTTAGCCACAAAATTTTATGCCAGGGCCA 3994
QY CTATAAATTTCACTGTCTTACCAAGAGAGACAAATTTCTAATACAGGTGCTGGAAGGCC 3952
Db 3995 CTAGTAAATTTCACTGTCTTACCAAGAGAGACAAATTTCTAATACAGGTGCTGGAAGGCC 4054
QY CTAGCGGCTTGTAGTGTGCACTAGCCAAACACCAAGATTTTCCCTACGCCCCGGGCCA 4012
Db 4055 TTAACAGGCTTTAGCACAGGTACCTCTCAAAACACTAGATATCTTACGCCCCGGGCCA 4114
QY GTATCTAGCCATACCATCTGCGGACACTGTATTAATATGTTACAGGAATAATGCCATT 4072
Db 4115 GTGTCTAGCCATACCATCTGCGGACACTGTATTAATATGTTACAGGAATAATGCCATT 4174
QY TCACATGGAACAAACCTTATGGAATGCTGAGGACAAAGATATCAGCAAGGGGTAGGA 4132
Db 4175 TCTCATGCTCAAACTTATGTTTAACTGAGGACAAAGATATCAGCAAGGGGTAGGA 4234
QY AGATTTCCAAATGAAAGAACAGCTTTAAGCTTACAGGTCTTAACTGCAACATAC 4192
Db 4235 AGATTTCCAAATGAAAGAACAGCTTTAAGCTTACAGGTCTTAACTGCAACATAC 4294
QY TTCCCTAATAAGGAACCCCAACATACACAGACCAATTTGAACGCTCTTATGTTGGG 4252
Db 4295 TTCCCAATAAAGGAACCCCAACATACACAGACCAATTTGAACGCTCTTATGTTGGG 4354
QY TCTGTTTGAACAGAGAGCTCTTCACTATGAAGTCAAGTGTGAGTAAAATCCCTAAC 4312
Db 4355 TCTGTTTGAACAGAGAGAGCTCTTCACTATGAAGTCAAGTGTGAGTAAAATCCCTAAC 4414
QY TTAGATGACAGTTTTAAACTCAATTTGAGGCTTACAGGCTTGAAGTAAAATCCCTAAC 4372
Db 4415 TTAGATGACAGTTTTAAACTCAATTTGAGGCTTACAGGCTTGAAGTAAAATCCCTAAC 4474
QY CCCCCTCAATATTTTAAATATTAACCAAGTGGGCCAAATTTGAGGTAAAATCCCTAAC 4432
Db 4475 CCCCCTCAATATTTTAAATATTAACCAAGTGGGCCAAATTTGAGGTAAAATCCCTAAC 4534
QY ATGGGAATTTACTTCTTCAATATGCTGTGGGAATTAATGACAGTTTACCATGACCTTT 4492
Db 4535 ATGGGAATTTACTTCTTCAATATGCTGTGGGAATTAATGACAGTTTACCATGACCTTT 4594
QY AAATGGGACCTTGAAGGCTTACTGGAAGGTGGAATCCCGAGCTGGGGTTTATCCTCT 4552
Db 4595 AAATGGGACCTTGAAGGCTTACTGGAAGGTGGAATCCCGAGCTGGGGTTTATCCTCT 4654
QY CATGAGCTGTGCTCAATTTACCATATGCTGTGGAATTAATGACAGTTTACCATGACCTTT 4612
Db 4655 CAGCAGCAGGCTCAATTTACCATATGCTGTGGAATTAATGACAGTTTACCATGACCTTT 4714
QY CACCAACAGCAGGATATGAAAGCCTGAAGAAATTTGTGGAATTTGTGGAATTTGTGAC 4672
Db 4715 CACCAACAGCAGGATATGAAAGCCTGAAGAAATTTGTGGAATTTGTGGAATTTGTGAC 4774

Db 581 GCAGTGTGGCTTCTAAGCTTGACTTTACCGGGGGCCACTAGCAGGGTCTGTACTTTT 640
QY 533 TTCAGGTGAATGTACAAATTTGAGGAGGCTATCATATCCATAGATTATGGTGTGC 592
Db 641 TTCAGTAGAATGTACAAATTTGAGGAGGCTATCATATTCATGTGTACTCGGGGGC 700
QY 593 CAGGACTAAATGCTAGAACTTAACTGTGTGCTAGAGGTTTATTTAATAATGTCTTT 652
Db 701 CAGGGTTAAACCCAGAAACCTTACAGTGTGTGTAGAGGGTTATTTAATAATGTACTTT 760
QY 653 ACCACTTGTACTGAAGTGTAACTTAAATTTTCCAGGAGTACTACCAAGGAA 712
Db 761 ATCACTTGTAACTGAAGTGTAAATTTTCCAGGAGTACTACCAAGGAA 820
QY 713 AATATTTAGAGATGAGAGCAGTTTATAGAAATTTTAACTTAATCAAAATTTCCITTA 772
Db 821 AATACTTTAGAGATGAGAGCAGTTTATAGAAATTTTAACTTAATCAAAATTTCCITTA 880
QY 773 ATGTTGTGTGTGTAACTTAATTTAGCGGTATATAGACACCTGTATTTCCGCCCTTT 832
Db 881 ATGTTGTGTGTGTAACTTAATTTAGCGGTATATAGACACCTGTATTTCCGCCCTTT 940
QY 833 TTCGCCGAGGAGCTTGTCACTCTAAAGACCCGCCATTTACTGCAATATACAGAGTGCTA 892
Db 941 TTAGAGGGGAGCTTGCATGCCAAGAAACCCGCCATTTACTACAGCCATTAATGATACTA 1000
QY 893 CTAAATGAATCGGGAGCTGTAGCTGTGGAGGGGAGATGTTGTGCCATTCGCTGGAAAGG 952
Db 1001 GTAGTGATGCTGGGGAGCTGTAGCGGCACAGGGGAGTGTGCCATTTAATGGGAAGG 1060
QY 953 GAACAAAGCGGGTTTAAAGTTTCAACCAATGTGTAAATTTGGCTATGTGAAACAGAGTAT 1012
Db 1061 GAACAAAGCGGGTTTAAAGTTTCAACCAATGTGTAAATTTGGCTATGTGAAACAGAGTAT 1120
QY 1013 TTACTGAAGATAAATGAATTAAGTGTAAATTTAAAGTGTGTAAATTTAAAGTGTGTAA 1072
Db 1121 TTACAGAGGATAAATGAATTAAGTGTAAATTTAAAGTGTGTAAATTTAAAGTGTGTAA 1180
QY 1073 ACAGTGGCAGCTTCAAAATTTCAAGTGTCTTAAAGTGTGTAAATTTAAAGTGTGTAA 1132
Db 1181 ACAGTGGCAGCTTCAAAATTTCAAGTGTCTTAAAGTGTGTAAATTTAAAGTGTGTAA 1240
QY 1133 TAGTACCCTAGTACATTTCTGTACATTTAGCTTAAAGTGTGTAAATTTAAAGTGTGTAA 1192
Db 1241 TAGTGCTACTAGCAGATTTTATTCATACAGACTTTGAGCAGGTTATGTGTATTAAG 1300
QY 1193 ABAATAAATAGTAAATTTATTTATGTGCAAAATCTATGATCCTCTTTTGTGGGTCAAC 1252
Db 1301 ACAATAAATTTGTAAATTTGTACTTTGTCAAAATCTATGACCCCTATTTGTGGGGCAGC 1360
QY 1253 ATGTGTTAAGGTGATTTGCAAAATTTGTAAATTTGTAAATTTGTAAATTTGTAAATTT 1312
Db 1361 ATGTGTTAAGGTGATTTGCAAAATTTGTAAATTTGTAAATTTGTAAATTTGTAAATTT 1420
QY 1313 CACCAAGTACTGGAAAAAATAATTTGGCAATTTGGCTTAAAGTGTGTAAATTTGTAAATTT 1372
Db 1421 CGCCCAAGTACAGGAAAAAATAATTTGGCAATTTGGCTTAAAGTGTGTAAATTTGTAAATTT 1480
QY 1373 GAATGTGAATTTGAATTAATGAATTTTCAATTTAATGTGTAGCGGGGAAAAAGTTTGG 1432
Db 1481 GCATGGTTTAACTGAATTAATGAATTTTCAATTTAATGTGTAGCGGGGAAAAAGTTTGG 1540
QY 1433 TGGTCTGGGATGAAGCATTATTAAGTCCACTATTTGTGGAAGCTGCAAAAGCCATTTTATG 1492
Db 1541 TGGTCTGGGATGAAGCATTATTAAGTCCACTATTTGTGGAAGCTGCAAAAGCCATTTTATG 1600
QY 1493 GTGGTCAGCCACAGGAGTATGAGAAATTCGTTGGCAGTGTGGCAGTGTCCGGGTGTC 1552
Db 1601 GGGGCAACCCACAGGAGTATGAGAAATTCGTTGGCAGTGTGGCAGTGTCCGGGTGTC 1660
QY 1553 CTGTGGTTTAAACAGCAATGGTGACATTTACATTTTGTGTGAGTGTGTAAATACCACTACAA 1612

Db 1661 CTGTGGTTTAAACAGCAATGGTGACATTTACTTTTGTGTAAAGCGGAAACACTACAA 1720
QY 1613 CTGTGATGCTTAAAGCTTTAAAGGAACGGATGGTAAAGCTTAACTTTACCAATAAGTGA 1672
Db 1721 CTGTACATGCTTAAAGCTTTAAAGGAACGGATGGTAAAGCTTAACTTTACTGTAAAGTGA 1780
QY 1673 GCCTGACATGGGTTTACTTACAGAGGCTGTATCAACAAATGGCTTAACTTTGGTGTAAAG 1732
Db 1781 GCCTGACATGGGTTTACTTAAACAGAGGCTGTATCAACAAATGGCTTAACTTTGGTGTAAAG 1840
QY 1733 CACAAAGCTGGAGCCACATATGAAAATGGGCAATTAACATTAACATTTGATTTCCCTGGAA 1792
Db 1841 CACAAAGCTGGAGCCACATATGAAAATGGGCAATTAACATTAACATTTGATTTCCCTGGAA 1900
QY 1793 TAAATGCAGATGCCCTCCACCCAGATCTCCAAACCAACCCCAATTTGTCAACAGACCACTA 1852
Db 1901 TTAATGCAGATGCCCTCCACCCAGATCTCCAAACCAACCCCAATTTGTCAACAGACCACTA 1960
QY 1853 TCAGCAGCAGTGGTGTGAAGCTCTGAAGAACTCAGTGAAGAGCTTTTTCACACTCA 1912
Db 1961 TCAGCAGCAGTGGTGTGAAGCTCTGAAGAACTCAGTGAAGAGCTTTTTCACACTCA 2020
QY 1913 TCACCTCCAGGCGCTCGGAACAGTGAACCCCGCGCTCTAGTACGCCGCTCCCGGGACCA 1972
Db 2021 TCACCCAGGCGCTCGGAACAGTGAACCCCGCGCTCTAGTACGCCGCTCCCGGGACCA 2080
QY 1973 GTTACAGGAATCAATTTGTCCGAAGCCAGTTTCTCCGAAGTGTAGCCGCTCGTGGG 2032
Db 2081 GTTACAGGAATCAATTTGTCCGAAGCCAGTTTCTCCGAAGTGTAGCTCATCTGGG 2140
QY 2033 AGGAAGCTTTTACACCGCGCTTCCCGATCAGTTTGTGTAACTTTAGTGGGTTGACT 2092
Db 2141 AAGAAGCTTCTACACACTTTTGGCAGACCACTTTCGTGAATCTTTAGTTGGGTTGATT 2200
QY 2093 TTGTATGGGATGGTGTGAGGGGATTTGCTGTGTGGAACATATATGTTAGTGGGTTGACT 2152
Db 2201 ATGTGTGGGACGGTGAAGGGTTTACCTGTGTGTGTGTGCAACATTTAACTAATGTG 2260
QY 2153 GGGCAGGTTGGGGCTTTGGCCCTCATTTGATTTAATGTGGGAGCTTGGTATAATGGATGA 2212
Db 2261 GGGGAGGTTGGGGCTTTGGCCCTCATTTGATTTAATGTGGGAGCTTGGTATAATGGATGA 2320
QY 2213 AATTTAGAGGTTTACTTCCAGACTTGTGCGCTGTGAGTTTGTATGTAGGAGCTTCTTAAC 2272
Db 2321 AATTTAGAGGTTTACTTCCAGACTTGTGCGCTGTGAGTTTGTATGTAGGAGCTTCTTAAC 2380
QY 2273 CATTTTCTGTGTAACTTTGTAAATAATGTCTTACTGTCTGGATTAACAAAGTTTGTAG 2332
Db 2381 CTTTTTCTGTGTAACTTTGTAAATAATGTCTTACTGTCTGGATTAACAAAGTTTGTAG 2440
QY 2333 ATTATGAGTAAACCACTTAACAAATGGTGGAAAGCAGTGCACAAATTTGCCAGGACGTG 2392
Db 2441 ATTATGAGTAAACCACTTAACAAATGGTGGAAAGCAGTGCACAAATTTGCCAGGACGTG 2500
QY 2393 TATAAGCAGTTTGTGCAATTTTATGAAAAAGCTTACTTGGAAACAGCTTGTAGAGCTTATTC 2452
Db 2501 TATCAGCAATTTGTGGAATTTTATGAAAAAGCTTACTTGGAAACAGCTTGTAGAGCTTATTC 2560
QY 2453 ATTTTAAAGACCATTTACCAATTTCTTTAGATAATCTTTTATAGAAAAACCCCTCTCTTT 2512
Db 2561 ATATTAAAGACCATTTACCAATTTCTTTAGATAATCTTTTATAGAAAAACCCCTCTCTCT 2620
QY 2513 TTTGACTTGTGTGCTTAAAGTAAATCTTTAAAAACTCTCCAGACCTATATAGTCA 2572
Db 2621 TTTGACTTGTGTGCTTAAAGTAAATCTTTAAAAACTCTCCAGACCTATATAGTCA 2680
QY 2573 CATTTTCAGAGCCATGGCAGTTATGTACCAACCCCAATGTGCTTATCATCCAGTAAACAGT 2632
Db 2681 CATTTTCAGAGCCATGGCAGTTATGTACCAACCCCAATGTGCTTATCATCCAGTAAACAGT 2740
QY 2633 AGTCAGAACTTAGAGGAAAAATGCAGTATTTATCTAGTGAAGCTTATACAAAGCTGGG 2692
Db 2741 CATGCAGAACTTAGAGGAAAAATGCAGTATTTATCTAGTGAAGCTTATACAAAGCTGGG 2800

2693 CAAGTTAGCATACAATTACCCGGTACTAACTATGTTGGGCTGGCAATGAGCTACAAGCT 2752
2801 CAAGTTAGCGTACAACCTACCCGGTACTAACTATGTTGGGCTGGCAATGAGCTACAAGCT 2860
2753 GGCGCTCCGAGAAATGCTGTGAGCAGTGTGCAAGGATTCATGACTTTAGGTATAGCCAA 2812
2861 GGCGCCCGCAAAATGCTGTGAGCAGTGTGCAAGGATTCATGACTTTAGGTATAGCCAA 2920
2813 TTGGCTAAAGTTGGGAATAATCTTATACATCTTACCATTTGGACGGTACGATGAAGATTTGTA 2872
2921 CTGGCTAAAGTTGGGAATAATCTTATACATCTTACCATTTGGACGGTACGATGAAGATTTGTA 2980
2873 AAAAAATATAAAAAATGAAACAGGGTTTCAAGCACAAGCAGTAAAGATTTACTTTACTTTTA 2932
2981 AAAAAATATAAAAAATGAAACAGGGTTTCAAGCACAAGCAGTAAAGATTTACTTTACTTTTA 3040
2933 AAAGGTGACGCTCCGCTGTGGGCCAATTTTCAAGGAAGTTTACCGGAAGTGGCCCGGTAC 2992
3041 AAAGGTGACGCTCCGCTGTGGGCCAATTTTCAAGGAAGTTTACCGGAAGTGGCCCGGTAC 3100
2993 AACGCTCAGAAAAATACCCAGCATGACTTCAAGTTAACTCTGCAGAGCCAGCATGCT 3052
3101 AACGCTCAGAAAAATACCCAGCATGACTTCAAGTTAACTCTGCAGAGCCAGCATGCT 3160
3053 GCAGGCGGGGAGGTAGCAACCTTCAAAAAAGCATGTGGAGTGAAGGGCTACATTTACT 3112
3161 GCAGGAGGGGGGCGAGTAATTTCTGTCAAAAGCATGTGGAGTGAAGGGGCGCATTTAGT 3220
3113 GCTAATTCGTAAAGTGTACATTTCTTAGGCAATTTTAAATCCATATGATCCAGAGCAT 3172
3221 GCTAATTCGTAAAGTGTACATTTCTTAGGCAATTTTAAATCCATATGATCCAGAGCAT 3280
3173 CATTATAGAGTGTCTCTCCAGCAGTGTAGTGTGCAAGTGTGAGTGTGAGGAGGCA 3232
3281 CATTATAGAGTGTCTCTCCAGCAGTGTAGTGTGCAAGTGTGAGTGTGAGGAGGCA 3340
3233 AAAGTGTGCACTAATAGTCCATTTATGGGGTACTCTACTCCGTGGAGATCTTAGATTTT 3292
3341 AAGTTTGCACCATCAGTCCCATATAGGAGTACTCAACCCATGGAGATTTAGATTTT 3400
3293 AATGCTTTAAATTTGTTTTCTCACCATTAGAGTTTCAGCAGTAAATGAAATATAGT 3352
3401 AATGCTTTAAATTTGTTTTCTCACCATTAGAGTTTCAGCAGTAAATGAAATATAGT 3460
3353 AGTATAGTCCAGATCTTTAACTGTAACTATTTTCAGAAATTCCTGTAAAGATGTCA 3412
3461 AGTATAGTCCAGATCTTTAACTGTAACTATTTTCAGAAATTCCTGTAAAGATGTCA 3520
3413 GACAAAAAGGAGGAGTGTGCAAGTTTACTGACAGCACCAAGGAGCTTTGTGTATGTTA 3472
3521 GACAAAAAGGAGGAGTGTGCAAGTTTACTGACAGCACCAAGGAGCTTTGTGTATGTTA 3580
3473 GTGGATCATGATGATATAATACCATATGCTAGGTTCAGGAGCAAGACACACTAGTCTCA 3532
3581 GTAGACCATGAATACAAAGTACCATATGTTAGGGCAAGGTTCAGGATCTTTAGCCCA 3640
3533 GAACTGCCAATTTGGGTTTACTTTTCCCGCCAGTATGCTTACTTAACAGTGTGAGTA 3592
3641 GAACTTTCTTATTTGGGTATATTTTCCCGCCAGTATGCTTACTTAACAGTGTGAGTA 3700
3593 AACACACAAAGGAATTTTCAGGAGACAGCAAAAAATTTGGCTAGTGAAGATCAGCTTTTAT 3652
3701 AACACACAAAGGAATTTTCAGGAGACAGCAAAAAATTTAGCAAGTGAAGATCAGCTTTTAT 3760
3653 GTGTTAGACACAGTTCATTTGAACTTTTGGGTACAGGGGATCTGCCACTATGCTCTAC 3712
3761 GTTTTGGAAACACAGTTCATTTTACGCTTTTAGGTACAGGAGTACAGCATCTATGCTTAT 3820
3713 AAATTTCCAGCTGTGCCCCAGAAAAACCTAGAGGGTGTGAGGCCAACTTTTATGAAATG 3772
3821 AAGTTTCTCCAGTGTGCCCCAGAAAAATTTAGAGGGGTGAGGCTCAACACTTTTATGAAATG 3880

3773 TACAACCCCTTTGTACGGTTCTCGTTTATGGGGTACCTGACACATTTAGGAGGGGACCCCTAA 3832
3881 TACAATCCCTTTATACGGATCCCGCTTATGGGGTTCCTTGACACATTTAGGAGGTGACCCAAA 3940
3833 TTTAGATCATTTGACACACAGAACACCGCAATTTACGCCACAAAACTTTATGCTTGGGCCA 3892
3941 TTTAGATCTTTAAACACATGAAGACCATGCAATTTACGCCCCCAAACTTTATGCTTGGGCCA 4000
3893 CTAATAAAATTTCAAGTGTCTACCAAGAGGAGACAAATTTCTTAATACAGGTGCTGGAAGGCC 3952
4001 CTAGTAACTCAGTGTCTACAAAGGAGGAGACAGCTCTAATACTGGAGCTGGAAGGCC 4060
3953 CTTACGGGCTTTAGTACTGGCACTAGCCAAAAACACAGAAATTTCCCTACGCCCGGGGCCA 4012
4061 TTAACAGGCTTTAGCACAGGTACTCTCTCAAAACACTAGAAATATCTTACGCCCTGGGCCA 4120
4013 GTATCTCAGCCATACCATCCTGGGACACTGATAAATATTTTACAGGAATAAATGCAAT 4072
4121 GTGTCTCAGCCATACCCACACTGGGACACAGATAAATATGTCACAGGAATAAATGCAAT 4180
4073 TCACATGGACAAACCACTTTATGAAATGCTGAGGACAAAGAGTATCAGCAAGGGGTAGGA 4132
4181 TCTATGGTTCAGACCACTTTATGTAACGCTGAAGACAAAGAGTATCAGCAAGGAGTGGT 4240
4133 AGATTTTCCAAATGAAAAAGAACAGCTTAAAGCAGTTTAAAGGCTTTAAACATGCAACATAC 4192
4241 AGATTTTCCAAATGAAAAAGAACAGCTTAAAGCAGTTTAAACATGCAACATAC 4300
4193 TTCCCTTAATAAGGAACCCCAACATACACAGACCAAAATTTGAAGCCCTCTTTATGTTGGGC 4252
4301 TTTCCCAATAAAGGAACCCCAACATATACAGATCAAAATTTGAGCGCCCTTAATGTTGGGT 4360
4253 TCTGTTTGAACACAGAGGAGCTCTTCACTATGAAAGTACAGTGTGGAGTAAATCCCTAAC 4312
4361 TCTGATGGAACAGAGAGCCCTTCTATGAAAGCCAGCTGTGGAGTAAATTTCAAT 4420
4313 TTAGATGACAGATTTTAAATCTCAATTTGAGCGCTTAGGGGGTGGGTTTGCATCAACCA 4372
4421 TTAGATGACAGATTTTAAATCTCAATTTGAGCGCTTAGGGAGGATGGGTTTGCATCAGCCA 4480
4373 CCCCCTCAATATTTTAAATATATACACAAAGTGGGCCAATTTGGAGGTATTAATCC 4432
4481 CCTCTCTCAATATTTTAAATATATTTACCAAAAGTGGGCCAATTTGGAGGTATTAATCA 4540
4433 ATGGGAATTTACTTACTTTAGTTCATATGCTGTGGGAATAATGACAGTACCATGACCTTT 4492
4541 ATGGGAATTTACTTACTTACTTTAGTTCATATGCTGTGGGAATAATGACAGTACCATGACCTTT 4600
4493 AAATTTGGGACCTCGAAAGGCTACTGGAAGGTGGAATTCGCCAGCTGGCGTTTATCTCTCT 4552
4601 AAATTTGGGACCTCGGAAGCTACGGGACCGTGGAAATCTCAACCTGGAGTATATCCCCG 4660
4553 CATGACGTGGTCAATTTACATATGATCTGTATGACCCCAAGCTACAGATGCAAGACAA 4612
4661 CACGACGACAGGTCAATTTACATATGATCTGTATGACCCCAAGCTACAGATGCAAGACAA 4720
4613 CACCAACAGACAGGATATGAAAGCCTGAAGATTTGTGACAGCCAAAGCGGTGTCAC 4672
4721 CACCAACAGACAGGATATGAAAGCCTGAAGATTTGTGACAGCCAAAGCGGTGTCAC 4780
4673 CCATTTGTAACATTTCCCAACCGTCTCAGCCAGGAACCGTCACCCAGCCCGCCAGCTGT 4732
4781 CCATTTGTAACATTTCCCAACCGTCTCAGCCAGGAATGGTAACTTAACGCCCAACAGT 4840
4733 GGCGCCAGATTTATGTTGCCCTTCCAAATACCCCGTAGGCAACCATCTATATAAGATAC 4792
4841 ACCACCCAGACTGTACTGCCCCCTCTGTACTTATAGACAGCCCTTAACACAAAGATAT 4900
4793 AGACGCTGTAGATATAAATTTAATGATATGACAAACATGTAATTTAGATGCTAG 4852
4901 AGACAAATGTAGAAATTTAAGTACTTAAACAGATATGAACAACTGTTTATTTAGAAATG 4960
4853 ATTATGTAATATGTACACAAAGTTTGGAAAAATAAAGCCCTTAAATAAATAATTCATAGTG 4912

457	DB	TAGACACTTCTGACTGGGAACCACTAACTACTAATACAGACTAAATGGCAATATACCTTAA	516
473	QY	GCAGTGTGCTTCTAAACCTTGATTTTAACTGGGGGGCGCTAGCAGGTGTGCTTATACCTTTT	532
517	DB	GCAGTGTGGCTTCTTAAGCTTGACCTTTACCGGGGGCGCTAGCAGGTGTGCTTGTACTTTT	576
533	QY	TTCAAGTGGAAATGTAAACAAATTTGAGGAAGGCTATCATATCCATGTATGTATTTTGGTGGTC	592
577	DB	TTCAAGTAGAATGTAAACAAATTTGAAGAGGCTATCATATTCATGTGGTTATTTGGGGGGC	636
593	QY	CAGGACTAAATGCTAGAAACTTAACTGTGTGGTAGAAGGTTTATTTTAAATAATGTTCTTTT	652
637	DB	CAGGGTTAAACCCAGAAACCTCAGAGTGTGTAGAGGGGTATTTTAAATATGTACTTT	696
653	QY	ACCATCTGTGAACCTGAAAGTGTAAACTTAAATTTTTGCCAGGATGACTACCAAAAGGAA	712
697	DB	ATCACCTTGTAACTGAAAATGTAAAGCTAAAAATTTTGGCCAGGAAATGACTTACAAAGGCA	756
713	QY	AATATTTTGAAGTAGAGTAGAGCAGTTTATAGAAAATTAATTAAGTAAAGAAAAATTCCTTTAA	772
757	DB	AATACTTTTAGAGATGGAGAGCAGTTTATAGAAAATTAATTTAATGAAAAAATAACCTTTAA	816
773	QY	ATGTTGTGTGGTGTAAACAAATTTTACCGGTATATAGACACTGTATTTTCGCGCTCTT	832
817	DB	ATGTTGTATGGTGTAACTAATATTCATGGATATATAGACTACTGTATTTTCGTACTCT	876
833	QY	TTCGGCGAGAGCTTGTTCATGCTAAAAAGACCCCGCATTTACTGCAAAATACAGACAGATGCTA	892
877	DB	TTAGAAAGGAGCTTGCATGCCAGAAACCCCGCATTTACCGAGCCATTAATGATACTA	936
893	QY	CTAATGAAACTGGGGAGTCTAGCTGTGGAGGGGAGATGTTGTGCCATTCGCTGGAAGG	952
937	DB	GTAGTGATCGGGGAGTCTAGCGGTACAGGGGCAGAGGTGTGTGCCATTTAATGGGAAGG	996
953	QY	GAACAAAACGGGGTTAAAGTTTCAAAACCAATGTAAATTCGCTATGTGAAAAACAGAGTAT	1012
997	DB	GAACATAAGGCTAGCATAAAGTTTCAAACTATGTTAAACTGTGTTGTGTGAAAAACAGAGTGT	1056
1013	QY	TTACTGAAGATAAATGAAATTTAGTGATTTTAAACCAATATACTTTTAAAGTAGCAGTC	1072
1057	DB	TTACAGAGATAGTGGAACTAGTTGACTTTTAAACGATACACTTTACTAAGCAGTAGTC	1116
1073	QY	ACAGTGGCAGCTTTCAAATTTCAAAGTGCCTTAAAGTTAGCTATTTATPAAAGCTACTAACT	1132
1117	DB	ACAGTGAAGTTTCAAATTTCAAAGTGCCTAAACCTAGCAATTTTATPAAAGCACTAAAT	1176
1133	QY	TAGTACCCACTAGTACATCTTGTTACATTCAGACTTTGAGCAGGTGTACTTGATTTAAAG	1192
1177	DB	TGGTGCCTACTAGCACATTTTATTGCAATACAGACTTTTGACAGGTTATGTGTATTTAAAG	1236
1193	QY	AAAATAAAATAGTAAATTTATTATGTCACAAACTATGATCTCTTTTATAGTGGGTCAAC	1252
1237	DB	ACATAAAATTTGTTAAATTTGTTCTTTGTCAAACTATGACCCCTTATTTGGTGGGCAGC	1296
1253	QY	ATGTGTTAAGTGGATTGACAAAAAATGTGGTAAAAAACAACCTGTGTTGTTTACGGGC	1312
1297	DB	ATGTGTTAAGTGGATTGATAAAAAATGTGCAAGAAATATACACTGTGTTTATATGGGC	1356
1313	QY	CACCAAGTACTGAAAAACAAATTTTGGCAATGGCTATTTGCTAAAAACTGTACAGGTGTATG	1372
1357	DB	CGCCAAAGTACAGAAAAACAAACTTGGCAATGGCCATTTGCTAAAAAGTGTTCACGATATG	1416
1373	QY	GAATGTTGAATTTGAAATTAATGAAACCTTCCATTTAATGATGTAGCGGGGAAAGTTGG	1432
1417	DB	GCATGGTTAACTGGAAATTAATGAAACCTTCCATTTAATGATGTAGCGGGGAAAGCTGG	1476
1433	QY	TGGTCTGGGATGAAGGCATTTATTAAGTCCACTATTGTGGAAGCTGCAAAAGCCATTTTAC	1492
1477	DB	TGGTCTGGGATGAAGGTATTTATTAAGTCTACAAATTTGTAGAAGCTGCAAAAGCCATTTAC	1536
1493	QY	GTGTCTAGCCAAACCAAGGTATAGTACAAAAATGGCGTGGCAGTGTGGCAGTCCCGGTGTGC	1552
1537	DB	GGGGCAACCCACCAAGGTATGATCAAAAAATGGCGTGAAGTGTAGCTGTGCTCGCTGGAGTAC	1596

QY	2633	AGTGCAAACTAGAGGAGAAAATCGCGATTAATCTAGTGAAGACTTACACAAGCGCTGGG	2692
DB	2677	CATGCGAAGACCTAGAGGAGAAAATGCGAGTATATCTAGTGAAGACTTACACAAGCGCTGGG	2736
QY	2693	CAAGTTAGCATACAAATTAACCGGTACTAACTATGTTGGGCCTGGCAATGAGCTACAGCT	2752
DB	2737	CAAGTTAGGCTACAACTAACCGGTACTAACTATGTTGGGCCTGGCAATGAGCTACAGCT	2796
QY	2753	GGGCGCTCGCGAGAAATGCTGTGCGACAGTCTGCACAGCAATTCATGACTTTAGGTATAGCCAA	2812
DB	2797	GGGCGCGCGCAAGTGCTGTGTCAGAGTCTGCACAGCAATTCATGACTTTAGGTATAGCCAA	2856
QY	2813	TTGGCTAGTTGGGAATAAATCCCTTATACACATTGGACGCTAGCAGATGAAGAATGTTTA	2872
DB	2857	CTGGCTAAGTTGGGAATAAATCCCTTATACACATTGGACGCTAGCAGATGAAGAATGTTTA	2916
QY	2873	AAAAATATAAAAAATGAAACAGAGGTTTCAAGCACAGCAGTAAAGATTACTTTACTTTTA	2932
DB	2917	AAAAATATAAAAAATGAAACAGAGGTTTCAAGCACAGCAGTAAAGATTACTTTACTTTTA	2976
QY	2933	AAAGGTGAGTGCCTCTGTGGCCCAATTTTCAAGGAAGTTTACCGGAAGTTCGCCGCTTAC	2992
DB	2977	AAAGGTGAGTGCCTCTGTGGCCCAATTTTCAAGGAAGTTCGCCGCTTACCGCGTTAC	3036
QY	2993	AACGCTTCAGAAAAATATACCCAGCAGTACTTCAGTTAACTCTGCAGAAAGCAGCACTGCT	3052
DB	3037	AACGCTTCAGAAAAATATACCCAGCAGTACTTCAGTTAACTCTGCAGAAAGCAGCACTGCT	3096
QY	3053	GCAGGGGGGAGGTAGCAACCCCTACAAAAAGCATGTGGAGTGCAGGGGCTACATTACT	3112
DB	3097	GCAGGGGGGAGGTAGCAACCCCTACAAAAAGCATGTGGAGTGCAGGGGCTACATTACT	3156
QY	3113	GCTAAATCTGTAAAGTGTACATCTCTAGGCCAATTTTAAATCCATATGATCCAGAGCAT	3172
DB	3157	GCCAACTCTGTAACTGTACATTTCCAGACAGTTTTTAAATCCATATGATCCAGAGCAC	3216
QY	3173	CATTATAAGTGTCTCTCCAGCAGCTAGTAGTGCACAAATGCTAGTGGGAAGAGGCCA	3232
DB	3217	CATTATAAGTGTCTCTCCAGCAGCTAGTAGTGCACAAATGCTAGTGGGAAGAGGCCA	3276
QY	3233	AAAGTGTGCACATTATAGTCCCAATATGGGGTACTCTACCTCGTGAGATCTTAGATTTT	3292
DB	3277	AAGGTTGCACCAATAGTCCCAATATGGGNATCTCAACCCCATGGAGATCTTAGATTTT	3336
QY	3293	AATGCTTTAAATTTGTTTTCTCACCATTAGAGTTTTCAGCACTTAATTTGAAAATATGGT	3352
DB	3337	AATGCTTTAAATTTATTTTTTTCACCTTAGAGTTTTCAGCACTTAATTTGAAAATATGGA	3396
QY	3353	AGTATAGTCCAGATGCTTTAACTGTAACTATTTTCAGAAATGCTGTGTAAGATGTACA	3412
DB	3397	AGTATAGTCTGTATGCTTTTAACTGTAACTATTTTCAGAAATGCTGTGTAAGATGTACA	3456
QY	3413	GACAAAACAGAGGAGGTGTGCAAGTTACTGACAGCACACAGGACGCTTGTGTATGTTTA	3472
DB	3457	GACAAAACAGAGGAGGTGTGCAAGTTACTGACAGCACACAGGACGCTTGTGTATGTTTA	3516
QY	3473	GTGATCATGAGTATAAATATACCATATGTGCTAGGTGAGGACAGACACACTAGTCCCA	3532
DB	3517	GTGACCATGATTAACAGTACCCATATGTGTTGGGCAAGGTGAGGATCTTTAGCCCCA	3576
QY	3533	GAACTGCCATTTGGGTTTACTTTCCCGCCCATGATGCTTACTTTTACAGTAGGTGAGTA	3592
DB	3577	GAACTTCCATTTGGGTTTACTTTCCCGCCCATGATGCTTACTTTTACAGTAGGTGAGTA	3636
QY	3593	AACACAAAGGAATTTACAGGACAGCAAAAATTTGGCTAGTGAAGATCAGCTTTTTAT	3652
DB	3637	AACACAAAGGAATCTCTGGAGACAGCAAAAATTTAGCAAGTGAAGATCAGCTTTTTAT	3696
QY	3653	GTCTTAGACCAAGTTCAATTTTGAJCTTTTGGGTACAGGGGATCTGCCACTATGCTCTAC	3712
DB	3697	GTCTTAGACCAAGTTCTTTTTCAGCTTTTAGGTACAGGAGTACAGCAACTATGCTTTAT	3756
QY	3713	AAATTTCCAGTGTGCCCCCAGAAAAACCTAGAGGCTGCAGGCCAACTTTTTTATGAAGT	3772

AB030693
LOCUS
DEFINITION
Erythrovirus B19 genes for non-structural protein NS1, capsid protein VP1, capsid protein VP2, isolate:Mi.
ACCESSION
AB030693
VERSION
AB030693.1 GI:6759332
KEYWORDS
VP1; VP2; NS1; capsid protein VP2; capsid protein VP1; non-structural protein NS1.
SOURCE
B19 virus
ORGANISM
Viruses; ssDNA viruses; Parvoviridae; Parvovirinae; Erythrovirus.
REFERENCE
1 (sites)
Ishii,K.K., Munakata,Y., Funato,T., Fu,Y., Koseki,N., Sugamura,K. and Sasaki,T.
TITLE
Sequence of human parvovirus B19 isolates from patients with rheumatoid arthritis
Unpublished
2 (bases 1 to 4803)
Ishii,K.K.
Direct Submission
Submitted (29-JUL-1999) Keiko K Ishii, Tohoku University School of Medicine, Department of Molecular Diagnostics; 1-1 Seiryomachi, Aoba-ku, Sendai, Miyagi 980-8574, Japan
(E-mail:ishii-k@mail.cc.tohoku.ac.jp, Tel:81-22-717-7373, Fax:81-22-717-7390)
FEATURES
source
Location/Qualifiers
1. .4803
/organism="B19 virus"
/mol_type="genomic DNA"
/isolate="Mi"
/db_xref="taxon:10798"
/map="65-4867"
/tissue_type="bone marrow"
/note="an isolate obtained from a patient with rheumatoid arthritis"
35..371
/note="p6 promoter"
372..2387
/genes="NS1"
372..2387
/genes="NS1"
/codon_start=1
/product="non-structural protein NS1"
/protein_id="BAA90288.1"
/db_xref="GI:6759332"
/translation="MELFRGLQVSSNVLDCCANDNMWCSLLDLDTSDEPLTHNRLM
AIVLSVASKLDFGCLAGCLYFFQVCKPEEGYHIHVIGGPGINPLNLTVCVEG
LFNNVLIHLVNVKRLPFGMTKGIYFRDGEQFIENYDMRKIPILNVKVCNIDGY
IDTCISLFRGACHAKPRITAAINDTSSDAGESSTGAEVVFPNGKGTAKSIKPT
MNVLCENRVFTEDKWLVDPNQYTLSSSHSGSFQISALKLAIYKATNLVPTSTFL
LHTDFQVWCIDKDKILVKLLQYDPLVGVHVRWIDKCKGKNTLWFGPPSTGK
TNLMAIAKSPVYGVNMNNENFPNDVAGSLVVDGIIKSTIVEAKAILGGQP
TRVDOKRGSAVPGVPVITSGNDITFVVSNGTITTVHAKALKERWKLNTVRCSP
DMGLLEADVQWLWCNAQSDHYENWALNTDFPFGNADALPDLQTLTFLVDTIS
ISSGGSESESESESEFNLTTPGAWNTPESSPTPGTSSGESFVSGSPVSEVVA
SWEEAFYTLADQFRELVLGVVDVGVGRGLPVCCQVHINNNGGLGLCPHCINVGAW
YNGWKREFTPLVRCSCVCHGASNPESVLTCKKCAVLSGLQSFVDE"
2380..4725
/genes="VP1"
2380..4725
/genes="VP1"
/codon_start=1
/product="capsid protein VP1"
/protein_id="BAA90289.1"
/db_xref="GI:6759334"
/translation="MSKSGKMWESDDKFAKAVQQVPEYKVTGDTLELIQLKDH
YNIISLDNPLENSLDFLVARIKNKNSPDLVSHRFGSHGQLSDHPHALSSSSHAE
PRGENAVLSEEDLHKFQVQSVLPNTYVGNELQAGPPQSAVDAARHIDFRYEQ
AKLGINPYHTWVADDELLKNIKNETGFOAVKDYFTLKGAAAPVAHFQGLPEVPA
YNASEKVPSTWSAEASTAGGGSNPVKSMWSEGAFTFSROFLIPYD
PEHYKVFSPAASSCHNAGKEAKVCTISPIMGYSTPWRYLDPNALNLPSLEFQHL
IENYGSIALDALPVLISEIAVKDVTGGGVQVDTOSITRCLMCLVDHYHKKYPIVGQ
GQDTLAPLPIWYFPQVAYLTVGDVNTQGISGDSKSLASESAFVLEHSSFQLLG

TCGTATMSYKPPVPENEGCSQHFYEMYNPLYGSRLGVDPDTLGGDPKFRSLTHEDH
ADQNFMPGVLNVSSTKGGSSNTGAKATGLSTGTSQNTSLRSLRPGVSPQVYHH
WDTDYVGINAISGQTYGNAEDKEYQQGVGRFPNEKEQLKQLGNLHYFPNKG
TQOYTDQIERPLWGVSNRRALHYESOLWSKIPNLDDSFKTQFALGGLWLPQPPQ
IFKLILPOSPIGGIKSMGTLTVOYAVGIMVTMTFKLGRKATGRWNPQGVYPPH
AAGHLPLVLYDPTATDAKQHRHGYEKEPEELWAKSRVHPL"
3061..4725
/gene="VP2"
3061..4725
/gene="VP2"
/codon_start=1
/product="capsid protein VP2"
/protein_id="BAA90290.1"
/db_xref="GI:6759335"
/translation="MTSVNSAEASTAGGGSNPVKSMWSEGAFTFSANVTCTFSRQF
LIPYDEHYKVFSPALATVTISEIAVKDVTGGGVQVDTSTGLDMLVDEHYKYP
BFOHLIENYGIAPDALVTIIEIAKDVDTGGGVQVDTSTGLDMLVDEHYKYP
VYLGQDTLAPLPIWYFPQVAYLTVGDVNTQGISGDSKSLASESAFVLEHSS
FOLLGDTATMSYKPPVPENEGCSQHFYEMYNPLYGSRLGVDPDTLGGDPKFRSL
THEDHAIQPNFMPGLVNSVSTKGGSSNTGAKATGLSTGTSQNTSLRSLRPGVSP
QYHHWTDKYVTGINAISGQTYGNAEDKEYQQGVGRFPNEKEQLKQLGNLHY
PNKGTQOYTDQIERPLWGVSNRRALHYESOLWSKIPNLDDSFKTQFALGGLW
OPPOIFELKILPOSPIGGIKSMGTLTVOYAVGIMVTMTFKLGRKATGRWNPQGV
VYPPHAGHLPLVLYDPTATDAKQHRHGYEKEPEELWAKSRVHPL"
ORIGIN
Query Match 73.9%; Score 3714.6; DB 14; Length 4803;
Best Local Similarity 86.5%; Pred. No. 0;
Matches 4124; Conservative 0; Mismatches 634; Indels 9; Gaps 2;
QY 1 GAGCTCACAGGAAATGACGTATCTGTCGCCCATCTTGTACCGGAAGTCCGCCCTACCGGC 60
DB 38 GAGCTCACAGGAAATGACGTATCTGTCGCCCATCTTGTACCGGAAGTCCGCCCTACCGGC 97
QY 61 GCGACCGCGGCATCTGATTTGGTGTCTTCTTTTGAATTTTGGCGGGCTTTTCCCG 120
DB 98 GCGACCGCGGCATCTGATTTGGTGTCTTCTTTTGAATTTTGGCGGGCTTTTCCCG 156
QY 121 CCTATGCAATAAGCGGCATCTTAAATGTTATATTTTAAATTTAAATGCAACAGCCT 180
DB 157 CCTATGCAATAAGCGGCATCTTAAATGTTATATTTTAAATTTAAATGTTTGT 216
QY 181 AACGGTTACTAGCGCGGAGTACCGG-----GCGGTATATAAGCAGCTGCGTCCCT 232
DB 217 AACGGTTAAATAGCGCGGAGTACCGGCGGCGACTACAGTATATATAGCAGCACTGCCG 276
QY 233 GACATCTTCTTCTGTTGCTTTTACCTGGAACCTACCTGCTGTTCTTTCCTGCTAG 292
DB 277 CAGCTCTTCTTCTGCGGCTGCTTTCTCTGACATTTCTTCTGCTTTTGTGAGCTAAC 336
QY 293 TAACAGTATTTATATACTAACTTTTAAATTTAAATGAGCTATTTCCGGGGTGTCTTGC 352
DB 337 TAACAGTATTTATATACTACTTCTTAACATCTAAATGAGCTATTTAGAGGGTGTCTT 396
QY 353 ACATTTCTTCTAACTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 412
DB 397 AAGTTTCTTCTAACTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 456
QY 413 TAGATACTTCTGCTGCGGACCACTAAACCATTTCTTAACAGATTAATGCGCAATATATA 472
DB 457 TAGACACTTCTGCTGCGGACCACTAAACCATTTCTTAACAGATTAATGCGCAATATATA 516
QY 473 GCAGTGTCTTCTTAACTTTGATTTTACCTGCGGGGCGCGCTAGCAGGCTTGTCTATCTTT 532
DB 517 GCAGTGTCTTCTTAACTTTGATTTTACCTGCGGGGCGCGCTAGCAGGCTTGTCTATCTTT 576
QY 533 TTTAGGTGGAATGTAAACAAATTTGAGGAAGGCTATCATATCCATGCTAGTTATTTGGTGC 592
DB 577 TTTCAAGTGAATGTAAACAAATTTGAGGAAGGCTATCATATCCATGCTAGTTATTTGGTGC 636
QY 593 CAGGACTAATCTAGAACTTAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTT 652
DB 637 CAGGGTTAAACCCAGAAACCTTACAGTGTGTGTAGAGGGGTTTATTAATTAATGTACTTT 696

QY 653 ACCATCTTGTAAGTGTAACTTAAATTTTGGCAGGATGACTACAAAGGAA 712
DB |||||
DB 697 ATCACTTGTAACTGAAATGTGAAGTAAATTTTGGCAGGATGACTACAAAGGCA 756
QY 713 AATATTTTACAGATGAGAGCAGTTTATAGAAATTTACTTAATGAAATTTTCTTTAA 772
DB |||||
DB 757 AATATTTTACAGATGAGAGCAGTTTATAGAAATTTACTTAATGAAATTTTCTTTAA 816
QY 773 ATGTGTGTGTGTGTAAATAATTTATGAGGATGATATGACACCTGTATTTCCGCTCTT 832
DB |||||
DB 817 ATGTGTGTGTGTGTAAATAATTTATGAGGATGATATGACACCTGTATTTCCGCTCTT 876
QY 833 TTCCGGCAGAGCTTGTATGCTTAAAGACCCCGCATTTACTGCAATACAGACAGTGTCTA 892
DB |||||
DB 877 TTAGAGGGGAGCTTGCATGCCATGCCAAGAACCCCGCATTTACCGCAGCCATAATGATCTA 936
QY 893 CTAATGAAATCTGGGAGTCTAGCTGTGGAGGGGAGATGTTGTGCCATTCCTCGGAAAGG 952
DB |||||
DB 937 GTAGTGTCTGGGAGTCTAGCGCAGAGGGGAGAGTGTGTGCCATTTAATGGGAAGG 996
QY 953 GAACAAAGCGGGGTAAAGTTTCAAAACCATGCTGTAATTTGGCTATGTGAAACAGAGTAT 1012
DB |||||
DB 997 GAACTAAGGCTAGCATAAAGTTTCAAACTATGTGTAACTGGTGTGTGAAACAGAGTGT 1056
QY 1013 TTACTGAAAGATAAGTAAATTTAGTGGATTTTAAACCAATATPACTTTTAAAGTAGCAGTC 1072
DB |||||
DB 1057 TTACAGAGATAAGTGGAACTAGTGTGACTTTTAAACCAAGTACACTTTACTAAGCAGTAGTC 1116
QY 1073 ACAGTGGCAGCTTTCAAACTCAAAAGTCTTAAAGTTTAGCTATTTATTAAGAGCTACTAAT 1132
DB |||||
DB 1117 ACAGTGGAGTGTTCAAATTCAAAGTGCACTAAACCTAGCAATTTTAAAGCAACTAAT 1176
QY 1133 TAGTACCACCTAGTACATTTCTGTTCATTCAGACTTTTGAGCAGGTACTTGTCAATTAAG 1192
DB |||||
DB 1177 TAGTGCCTACTAGCACATTTTATTTGCATACAGACTTTGAGCAGGTATGTGTATTAAG 1236
QY 1193 AAAATAAATAGTAAATTTATTTGTCCAAACTATGATCTCTTTTAGTGGGTCAAC 1252
DB |||||
DB 1237 ACAATAAATTTGTAAATTTGTACTTTGTCAAACTATGACCCCTTATTTGGTGGGCGAC 1296
QY 1253 ATGTGTTAAGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1312
DB |||||
DB 1297 ATGTGTTAAGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1356
QY 1313 CACCAAGTACTGCAAAACCAATTTGCGCAATGCTATTTGCTAAACCTGTATGACAGTGTATG 1372
DB |||||
DB 1357 CGCCAAAGTACAGGAAACCAACTTGGCAATGGCCATTTGCTAAAGAGTGTTCAGTATATG 1416
QY 1373 GAATGGTGAATTTGGAATAATGAAACCTTTCCATTTAATGATGTAGCGGGAAGTTTGG 1432
DB |||||
DB 1417 GCATGGTTAATCTGGAATAATGAAACCTTTCCATTTAATGATGTAGCAGGAAAGCTTTGG 1476
QY 1433 TGCTCTGGGATGAGGCAATTTATAGTCCACTTATTTGTGGAAGCTGCAAAAGCCATTTTGG 1492
DB |||||
DB 1477 TGCTCTGGGATGAGGCAATTTATAGTCCACTTATTTGTGGAAGCTGCAAAAGCCATTTTGG 1536
QY 1493 GTGGTCAGCCAAACAGGGTAGATCAGAAATGCGTGGCAGGTGCGCAGTGGCCGGTGTGC 1552
DB |||||
DB 1537 GCGGGCAACCCACAGGGTAGATCAAAATGCGTGGGAGGTGTAGCTGTGCTGGAGTAC 1596
QY 1553 CTGTGTTATACAGCAATGCTGTGATCAATTTGTTGAGTGGTGTGATTAACCACTACAA 1612
DB |||||
DB 1597 CTGTGTTATACAGCAATGCTGTGATCAATTTGTTGAGTGGTGTGATTAACCACTACAA 1656
QY 1613 CTGTGCTATGCTAAAGCCCTTAAAGGAACGATGTTAAAGCTTAACTTTACCATTAAGATGTA 1672
DB |||||
DB 1657 CTGTACATGCTAAAGCCCTTAAAGGCGCATGTTAAAGTTTAACTTTTACTGTAAAGATGCA 1716
QY 1673 GCCCTGACATGGGTTTACTTACAGAGGCTGATGTACAACTAGCTTAACTTTGCTGTAAATG 1732
DB |||||
DB 1717 GCCCTGACATGGGTTTACTTACAGAGGCTGATGTACAACTAGCTTAACTTTTACTGTAAATG 1776

QY 1733 CACAAAGCTGGAGCCACTATGAAAATCTGGCAATAAATCTACATTTGATTTCCCTGGAA 1792
DB |||||
DB 1777 CACAAAGCTGGAGCCACTATGAAAATCTGGCAATAAATCTACATTTGATTTCCCTGGAA 1836
QY 1793 TAAATGAGATGCTCTCCACCCAGATCTCCAAACACCCCCATTTGTCACAGACCAAGTA 1852
DB |||||
DB 1837 TTAATGAGATGCTCTCCACCCAGATCTCCAAACACCCCCATTTGTCACAGACCAAGTA 1896
QY 1853 TCAGCAGCAGTGTGTGGAAGCTCTGAAGAACTCAGTGAAGAGCAGCTTTTCAACCTCA 1912
DB |||||
DB 1897 TCAGCAGCAGTGTGTGGAAGCTCTGAAGAACTCAGTGAAGAGCAGCTTTTCAACCTCA 1956
QY 1913 TCATCTCCAGCCGCTGGAAACAGTGAAGAAACCCCGCTCTAGTACGCCGCTCCCGGGACCA 1972
DB |||||
DB 1957 TCACCCAGCCGCTGGAAACAGTGAAGAAACCCCGCTCTAGTACGCCGCTCCCGGGACCA 2016
QY 1973 GTTTCAGGAGAAATCATTTTGGCAGACCCAGTTTCTCCGAAGTTGTAGTCTGCTGGG 2032
DB |||||
DB 2017 GTTTCAGGAGAAATCATTTTGGCAGACCCAGTTTCTCCGAAGTTGTAGTCTGCTGGG 2076
QY 2033 AGGAAGCTTTTACACGCGCTTGGCCGATCAGTTTCTCCGAAGTTGTAGTCTGCTGGG 2092
DB |||||
DB 2077 AAGAAGCTTTTACACACCTTTGGCAGACCCAGTTTCTCCGAAGTTGTAGTCTGCTGGG 2136
QY 2093 TTGTATGGATGGTGTGAGGGAATGCTGTTTCTGCTGTGGAACATATAAACAACAGTG 2152
DB |||||
DB 2137 ATGTGTGGGAGCGTGTAAAGGGTTTACTGTGTGTGTGTGCAACATATTAACATAGTG 2196
QY 2153 GGGAGGGTGTGGGCTTTGCCCTCATTTGATTAATGTTGGAGCTGTGTAATAAGGATGGA 2212
DB |||||
DB 2197 GGGAGGGTGTGGGCTTTGCCCTCATTTGATTAATGTTGGAGCTGTGTAATAAGGATGGA 2256
QY 2213 AATTAGAGTTTACTCCAGACTTGTGCGCTGCGAGTTTGTGCGATGTAGTCCATGTGGAGCTTCTAATC 2272
DB |||||
DB 2257 AATTTCAGAAATTTACCCAGATTTGGTGTGATGTAGTCCATGTGGAGCTTCTAATC 2316
QY 2273 CATTTCTGTGTAACTTTGTAATAATGCTTACCTGTCTGATTAACAAAGTTTGTAG 2332
DB |||||
DB 2317 CCTTTCTGTGTAACTTTGTAATAATGCTTACCTGTCTGATTAACAAAGTTTGTAG 2376
QY 2333 ATTATGAGTAAACCACTTAAACAAATGTTGGAAAGCAGTGACAAATTTGCCAGGAGCTG 2392
DB |||||
DB 2377 ATTATGAGTAAAGAAAGTGGCAATGTTGGAAAGTGTATTAATTTCTAAGAGCTGTG 2436
QY 2393 TATAAGCAGTTTGTCAATTTTATGAAAGCTTCTGGAACAGACTTAGAGCTTATTCAA 2452
DB |||||
DB 2437 TATCAGCAATTTGTGGAATTTTATGAAAGGTTTACTGGAACAGACTTAGAGCTTATTCAA 2496
QY 2453 ATTTTAAAGACCATTTACCAACTTTCTTTAGATAATCTTTAGAAAACCCCTCTCTTTA 2512
DB |||||
DB 2497 ATATTAAAGATCATTTATTAATTTCTTTAGATAATCTTTAGAAAACCCCTCTCTCTG 2556
QY 2513 TTGTAGCTTGTGCTGCGATTTAAAGATTAATCTTAAAGCTCTCTCCAGACTATATAGTCA 2572
DB |||||
DB 2557 TTGTAGCTTGTGCTGCGATTTAAAGATTAATCTTAAAGCTCTCTCCAGACTATATAGTCA 2616
QY 2573 CATTTTTCAGAGCCATGGAAGTATCTGCAACCCCGCTTATCATCAGTAAAGT 2632
DB |||||
DB 2617 CATTTTTCAGAGCCATGGAAGTATCTGCAACCCCGCTTATCATCAGTAAAGT 2676
QY 2633 AGTCAGAACCTTAGAGGAAATGAGTATTTCTAGTGAAGCTTACACAGCCCTGGG 2692
DB |||||
DB 2677 CATGAGAACCTTAGAGGAAATGAGTATTTCTAGTGAAGCTTACACAGCCCTGGG 2736
QY 2693 CAAGTTAGCATACAAATTAACCGGTACTTAACTTGTGCGCTTGGCAATGAGCTACAAGCT 2752
DB |||||
DB 2737 CAAGTTAGCTTAACTTAACTTGTGCGCTTGGCAATGAGCTACAAGCT 2796
QY 2753 GGGCTCTCGCAGAAATGCTGTGGAAGTGTGCAAGGATTCATGACTTTAGCTATAGCCAA 2812
DB |||||
DB 2797 GGGCTCTCGCAGAAATGCTGTGGAAGTGTGCAAGGATTCATGACTTTAGCTATAGCCAA 2856
QY 2813 TTGGCTAAGTTGGGAATAAATCTTTATACACTTTGGACGGTAGCAGATGAAGAATTTGTTA 2872

Db 2857 CTGGCTAGTGGGAATAATCATATACTCATTTGGACTGTAGCAGTGGAGCTTTTA 2916
Qy AAAAAATATAAAAAATGAACAGAGGTTTCAAGCACAGAGTAAAGATTTACTTTTA 2932
Db AAAAAATATAAAAAATGAACAGAGTGGTTTCAAGCACAGTAAAGACTACTTTACTTTA 2976
Qy AAGGTGACAGTGCCTCTGCGCCATTTTCAAGGAAGTTTACCGGAAGTGCCTCGGTAC 2992
Db AAGGTGACAGTGCCTCTGCGCCATTTTCAAGGAAGTTTTCGCGAAGTTTCCCGCTTAC 3036
Qy AAGCCTCAGAAAAATACCCAGCAGTACTCAGTTAACTCTGCAAGCCAGCAGCTGTT 3052
Db AAGCCTCAGAAAAATACCCAGCAGTACTCAGTTAACTCTGCAAGCCAGCAGTCTGTT 3096
Qy GCAGCGGGGGAGGTAGCAACCCATCAAAAAAGCATGTGGAGTGAAGGGGCTACATTTACT 3112
Db GCAGGAGGGGGGAGTAACTCTGTCAAAAGCATGTGGAGTGGAGGGGCGCACTTTTACT 3156
Qy GCTAATCTGTAAAGTGTACATCTCTAGGCAATTTTAAATTCATATGATCCAGAGAT 3172
Db GCCAATCTGTAACTGTATTTCCAGACAGTTTTAAATTCATATGATCCAGAGCAC 3216
Qy CATTATAAGTGTCTCTCAGCAGTACTAGTGCACCAATGCTAGTGGGAAGAGGCA 3232
Db CATTATAAGTGTCTCTCAGCAGTACTAGTGCACCAATGCTAGTGGGAAGAGGCA 3276
Qy AAAGTGTGACATTAAGTCCCATTAAGTGGGTACTCTACTCCGTTGAGATCTTAGATTTT 3292
Db AAGTTTGCACCATTAAGTCCCATTAAGTGGGTACTCTACTCCGTTGAGATCTTAGATTTT 3336
Qy AATGCTTTAAATTTGTTTTCTCAACATTAAGTGTTCAGCAGTAAATGAAATTAAGT 3352
Db AATGCTTTAAATTTTATTTTTTCACTTTAGAGTTTTCAGCAGTAAATGAAATTAAGT 3396
Qy AGTATAGTCTCAGATGCTTTAACTGTAATTTTCAAGAAATGCTGTAAAGATGTCACA 3412
Db AGTATAGTCTCAGATGCTTTAACTGTAATTTTCAAGAAATGCTGTAAAGATGTCACA 3456
Qy GACAAACAGGAGGAGTGTGAAGTACTGACAGCACACAGGAGCTTTGTATGTTA 3472
Db GACAAACAGGAGGAGTGTGAAGTACTGACAGCACACAGGAGCTTTGTATGTTA 3516
Qy GTGGATCATGATATAAATACCATATGCTAGGTACGGGCAAGACACACTAGTCTCA 3532
Db GTAGACCATGAATACAAGTACCATATGTTAGGGCAAGGTACAGTACTTTAGCCCA 3576
Qy GAAGTCCCATTTGGGTTTACTTTCCCGCCAGTATGCTTTAAACAGTAGTGAAGTA 3592
Db GAAGTCCCATTTGGGTTTACTTTCCCGCCAGTATGCTTTAAACAGTAGTGAAGTA 3636
Qy AACACACAGGAATTTACAGAGACAGCAAAATTTGGCTAGTGAAGATCAGCTTTTAT 3652
Db AACACACAGGAATTTACAGAGACAGCAAAATTTGGCTAGTGAAGATCAGCTTTTAT 3696
Qy GTGTTAGACACAGTTCAATTTGGAATTTGGGTACAGGGGATCTGCCACTATGCTTAC 3712
Db GTTTTGGACACAGTTCTTTTCACTTTTAGGTACAGGAGGTACAGCAACTATGCTTAT 3756
Qy AATTTCCAGCTGTGCCCCCAGAAACCTTAGAAGGCTGAGGCCAACATTTTATGAAGT 3772
Db AATTTCCAGCTGTGCCCCCAGAAATTTAGAGGCTGAGGCCAACATTTTATGAAGT 3816
Qy TACACACCTTTGTACGGTTCTGTTTGGGTACCTGACACATTTAGGAGGAGCCCTTAA 3832
Db TACATCCCTTTTACGGATCCCGCTTAGGGTTCTTGACACATTTAGGAGTGAACCAAA 3876
Qy TTTAGATCATTGACACACAGAACACAGCAATTTAGCCCAAAATTTATGCTGGGCA 3892
Db TTTAGATCATTTAACACATGAAGACCATGCAATTTAGCCCAAAATTTATGCGAGGCA 3936
Qy CTAATAATTCAGTGTCTACCAAGAGAGACAAATTTAATACAGGTCTCGAAAGGCC 3952

Db 3937 CTAGTAAACTCAGTGTCTCAAAAGGAGGAGACAGCTCTAATACTGGAGCTGGAAAGCC 3996
Qy CTACCGGGCTTTAGTACTGGCACTAGCCAAAACACACAGAAATTTCCCTACGCCCGGGCCA 4012
Db TTAACAGGACTTTAGCACAGGTACTCTCAAAACACTAGAAATATCTTTACGCCCTGGGCA 4056
Qy GTATCTCAGCATACATCAGTGGGACACTGATTAATATGTTACAGGAATAATGCAAT 4072
Db GTGTCTCAGCATACATCAGTGGGACACTGATTAATATGTTACAGGAATAATGCAAT 4116
Qy TCACATGGAACAAACCACTTATGGAATGCTAGGACAAAGAGTATCAGCAAGGGGTAGGA 4132
Db TCTCATGTGTCAGCACTTATGTTGTAACGCTGAAGACAAAGAGTATCAGCAAGGGGT 4176
Qy AGATTTCCAAATGAAAAAGAACAGCTTAAAGAGTCTTAAGAGTCTTAACATGACACATAC 4192
Db AGATTTCCAAATGAAAAAGAACAGCTTAAAGAGTCTTAAGAGTCTTAACATGACACATAC 4236
Qy TTCCCTTAATAAGGAACCCCAATACACAGACCAAAATTAAGCCCTCTTATGTTGGG 4252
Db TTCCCAATTAAGGAACCCCAATATACAGATCAAAATTAAGCCCTCTTATGTTGGG 4296
Qy TCTGTTTGGAAACAGAGAGTCTCTCACTATGAAAGTCAAGTGTGGAAGTAAATCCCTAAC 4312
Db TCTGTTTGGAAACAGAGAGTCTCTCACTATGAAAGTCAAGTGTGGAAGTAAATCCCTAAC 4356
Qy TTAGATGACAGTTTTTAAATCTCAATTTGAGCGCTAGGCGGTGGGTTTGATCAACCA 4372
Db TTAGATGACAGTTTTTAAATCTCAATTTGAGCGCTAGGCGGTGGGTTTGATCAACCA 4416
Qy CCCCTCAAAATTTTAAATATCTACCAAAAGTGGGCCAAATTTGAGAGTATTAATCA 4432
Db CCTCTCAAAATTTTAAATATCTACCAAAAGTGGGCCAAATTTGAGAGTATTAATCA 4476
Qy ATGGGAATTTACTACTTTAGTTCAATATGCTGGAATTAATGACAGTACCCTGTT 4492
Db ATGGGAATTTACTACTTTAGTTCAATATGCTGGAATTAATGACAGTACCCTGTT 4536
Qy AAATTTGGGACCTTCGAAAGGCTACTGGAAGTGAATCCCGCTGGCGTTTATCTCTCT 4552
Db AAATTTGGGACCTTCGAAAGGCTACTGGAAGTGAATCCCGCTGGCGTTTATCTCTCT 4596
Qy CATGACGTGTGTTTATTTACCATATGATCTGATGAGCCCAACAGCTACAGTGAAGCA 4612
Db CACGACGAGGTCAATTTACCATATGATCTGATGAGCCCAACAGCTACAGTGAAGCA 4656
Qy CACACAGACAGGTATGAAAGCTGGAAGTGTGGAATTTGGAAGTGTGGAATTTGGA 4672
Db CACACAGACAGGTATGAAAGCTGGAAGTGTGGAATTTGGAAGTGTGGAATTTGGA 4716
Qy CCATTTGTAACATTTCCCGCTGCTCAGCCAGGAACCGTCAACCCAGCCCGCTGTT 4732
Db CCATTTGTAACATTTCCCGCTGCTCAGCCAGGAACCGTCAACCCAGCCCGCTGTT 4776
Qy GCCGCCAGATTTATGTTGCCCTTCC 4759
Db ACCACCCAGACTGTACCTGCCCTTCC 4803

RESULT 15
PVB19X560
LOCUS
DEFINITION
Parvovirus B19 DNA, patient I/1, genome position 413-5044.
ACCESSION
Z70560
VERSION
Z70560.1
KEYWORDS
GI:1262041
SOURCE
B19 virus
ORGANISM
B19 virus
REFERENCE
1
AUTHORS
Hemauer, A., Von Pöblotzki, A., Gigler, A., Cassinotti, P., Siegl, G.,
Wolf, H. and Modrow, S.
TITLE
XXXSequence variability among different parvovirus B19 isolates

Unpublished
2 (bases 1 to 4631)
Hemauer,A.
Direct Submission
Submitted (03-APR-1996) A. Hemauer, Inst. f. Med. Mikrobiologie,
und Hygiene, Franz-Josef- Strauss-Allee 11, D- 93053 Regensburg,
FRG

FEATURES
source Location/Qualifiers
1. .4631
/organism="B19 virus"
/mol_type="genomic DNA"
/isolate="patient 1/1"
/db_xref="taxon:10798"
/map="413-5044 nt"
24. .2039
/gene="orf1"
24. .2039
/gene="orf1"
/codon_start=1
/protein_id="CAA94472.1"
/db_xref="GI:1262042"
/db_xref="SPTREMBL:Q85151"
/translation="MEFLRGVLQVSNVLDNCANDNMWCSLLDLDTSWEP LTHNRLM
AIYSSVASKDFTGELPGLAGCYFQVECNKFEERYHIVVIGGGLNPNRLTVCGVE
LFNVLVHLVTENVKLFLPGMTTKGYFRDGEQIENYLMKKIPLNVMVCVNTIDY
IDTCISATFRGACCHAKKPRITTAINDTSSDAGSSCTGAEVVPFGKGTGKASIKQT
MVLNLCENRVETEDKVLDPNQVYLLSSHSFQIQSALKLAIYKATNLVPTSTFL
LTDLEQVQKIKDNKILVKLLCONVDPLLVGHQHLWIDKKCKKNLTVFIQPPSTGK
TNLMAIAKSPVYGVVWNNENEPENDVAGKSLVVMDEGIKSTIVEAAKILGQGP
TRVDQMRGVSVAVGPVPVITNSGDIITFVSGNTITTHAKALKERWKLNFTRVCS
DMGLTREADYQOHLTWCNAGSDHYENNAINTYDFPGINADALHPDLQTTPTVDT
ISSGGSSRELSESSFLNLTIPGAMNETTPRSTPIPTGSSGSGFGSPVSSEVAA
SWEAFYPLADQFERLLVGVYVMDGVRGLPVCQVHINNSGGGLGLCPHCINVGAG
YGNWKKFEFTDILVRCSCHVGASNPFSVLTKCKKAYLSGLSPVDYE"
4271. .4582
/gene="orf2"
4271. .4582
/gene="orf2"
/codon_start=1
/protein_id="CAA94473.1"
/db_xref="GI:1262043"
/db_xref="SPTREMBL:Q89711"
/translation="MTYMTPLQMQNNTTDMDKSLKNGQPKAVCTHCKSPPCQP
GCYTKRPVPPRLYLPPEVIRQPNTKIDNVEFKYLTRYEQHVIRMLRLCNMYONLE
K"

ORIGIN
Query Match 72.2%; Score 3632.6; DB 14; Length 4631;
Best Local Similarity 86.5%; Pred. No. 0;
Matches 4007; Conservative 0; Mismatches 624; Indels 0; Gaps 0;
QY 305 ATACTAATCTTTTAATTTACTAATGAGCTATTTTCGGGGTCTCTGCACATTTCTCTA 364
1 ATACTACTTGTTTAAACATCTAATGAGCTATTTAGAGGGTGTCTCAAGTTCTTCTTA 60
QY 365 ACATCTTGACTGTGCTAATGATACTGTGTGTCTCTATGCTAGACTTAGACTTCTG 424
Db 61 ATGTTCTTGACTGTGCTAACGATACTGTGTGTGTCTTTACTGATTAGACACTTCTG 120
QY 425 ACTGGGAACCACTAACCCATTTCTAACAGATTAATGCGAATATATTAGCAGCTGTGCTT 484
Db 121 ACTGGGAACCACTAATCTCATCTAACAGACTAATGCGAATATATTAGCAGCTGTGCTT 180
QY 485 CTAAACTTGTATTTTACTGGGGGGCGCTAGACAGTGTGCTTATATCTTTTTCAGGTGGAAT 544
Db 181 CTAGCTTGACTTTACCGGGGGGGCGCTAGCAGGGTGTCTTACTCTTTTCAAGTAGAAT 240
QY 545 GTAAACAAATTTGAGGAAGGCTATCATATCCATGTAGTTATTTGNGGTGCCAGCTAATG 604
Db 241 GTAAACAAATTTGAAGAAGGCTATCATATTCATGTGTTATTTGGGGGGCGGGTTAAAC 300
QY 605 CTAGAACTTAACGTGTGCGCTAGAGGTTATTATTAATATGTTCTTTTACATCTTGTA 664

QY 1745 GCACATATGAAAACTGGGCAATAACTACACATTTGATTTCCCTGGAATAAATGACAGATG 1804
DB 1441 ACCACTATGAAAACTGGGCAATAACTACACATTTGATTTCCCTGGAATAAATGACAGATG 1500
QY 1805 CCTCCACCCAGATCTCCAAACACACCCCATTTGTCTCCAGACACACCATGATCAGCAGCAGTG 1864
DB 1501 CCTCCACCCAGACCTCCAAACACACCCCATTTGTCTCCAGACACACCATGATCAGCAGCAGTG 1560
QY 1865 GTGGTGAAGCTCTGAAGAACTCAGTGAAGCAGCTTTTTTCAACCTCATCATCTCCAGGGG 1924
DB 1561 GTGGTGAAGCTCTGAAGAACTCAGTGAAGCAGCTTTTTTCAACCTCATCATCTCCAGGGG 1620
QY 1925 CTGTGAACAGTGAAACCCCGCGCTCTAGTACGCGCGCTCCCGGGAACAGTTTCAGAGAAAT 1984
DB 1621 CTGTGAACAGTGAAACCCCGCGCTCTAGTACGCGCGCTCCCGGGAACAGTTTCAGAGAAAT 1680
QY 1985 CATTTCTCGGAAGCCAGTTTCTCCGAAAGTGTAGCCGCTCGTGGGAGGAGCTTTTTT 2044
DB 1681 CATTTGGCGGAAGCCAGTTTCTCCGAAAGTGTAGCTGATCTGTGGGAAGAGCCCTCT 1740
QY 2045 ACACGCGCTGTGCGGATCAGTTTCTGTGAACCTGTGTAGTGGGTTGACTTTGTATGGGATG 2104
DB 1741 ACACACCTTTGGCAGACAGTTTCTGTGAACCTGTGTAGTGGGTTGACTTTGTATGGGATG 1800
QY 2105 GTGTAGGGGATGTCCTGTGTGTGTGTGTGTGAACATATAACACAGTGGGGGAGGGTTGG 2164
DB 1801 GTGTAGGGGATGTCCTGTGTGTGTGTGTGTGAACATATAACACAGTGGGGGAGGGTTGG 1860
QY 2165 GCTTTGCCCTCATTTGATTTGATGTGGGAGCTGTGTATGATGGAATTTAGAGAT 2224
DB 1861 GACTTTGTCCCCATTTGATTTGATGTGGGAGCTGTGTATGATGGAATTTAGAGAT 1920
QY 2225 TTACTCCAGACTTGTGCGCTGAGTTGTCTGTAGTGGGAGCTCTAACCCATTTCTGTGT 2284
DB 1921 TTACCCCAATTTGGTGGAGTGTAGTGGCACTGTGGGAGCTCTAATCCCTTTCTGTGT 1980
QY 2285 TAACTTTGTAATAATGTCTTACCTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2344
DB 1981 TAACTTGTCAATAATGTCTTACCTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2040
QY 2345 ACCACTTAACAATGTGGGAAAGCAGTGCACAAATTTGCCAGGACGTGTGTATGAGCATTT 2404
DB 2041 GAAAGTGGCAATGTGGGAAAGTGTATGATTAATTTGTAAAGCTGTGTATGAGCAATTT 2100
QY 2405 GTGCAATTTTATGAAAGCTACTGGAACAGACTTGTAGCTTATTCAAATTTTAAAGAC 2464
DB 2101 GTGGAATTTTATGAAAGCTTACTGGAACAGACTTGTAGCTTATTCAAATTTTAAAGAT 2160
QY 2465 CATTAACAATTTCTTTAGATATCTTTTAGAAAACCCCTCTCTTTTATTTGACTTAGTT 2524
DB 2161 CATTAATAATTTCTTTAGATAATCTCTTAGAAAACCCCTCTCTCTTTGACTTAGTT 2220
QY 2525 GCTCCGATTAAGATTAATCTTAAACCTCTCCAGCTTATAGTCATCATTTTCAGAC 2584
DB 2221 GCTCGATTTAAATAATTAACCTTAAACCTCTCCAGCTTATAGTCATCATTTTCAGAT 2280
QY 2585 CATGACAGTATCTGACCAACCCCATGCTTATCATCCAGTAAACAGTGTGAGAACT 2644
DB 2281 CATGACAGTATCTGACCAACCCCATGCTTATCATCCAGTAAACAGTGTGAGAACT 2340
QY 2645 AGAGGAGAAATGACGATATATCTAGTGAAGACTTACAAAGCTGGGCAAGTTAGCAT 2704
DB 2341 AGAGGAGAAATGACGATATATCTAGTGAAGACTTACAAAGCTGGGCAAGTTAGCAT 2400
QY 2705 CAATTACCGGTACTAACTATGTTGGGCTGGCAATGAGCTCAAGCTGGGCTCGGAG 2764
DB 2401 CAACTACCGGTACTAACTATGTTGGGCTGGCAATGAGCTCAAGCTGGGCTCGGAG 2460
QY 2765 AATGCTGTGACAGTCTCAAGGATTTATGATTTTGTAGTATAGCAATTTGCTAGTTG 2824
DB 2461 AGTGTCTGTGACAGTCTCAAGGATTTATGATTTTGTAGTATAGCAATTTGCTAGTTG 2520

QY 2825 GGAATAAATCCTTATATACATTTGGACGGTAGCAGATGAAGAAATTTGTTAAAAATATAAAA 2884
DB 2521 GGAATAAATCCTTATATACATTTGGACGGTAGCAGATGAAGAAATTTGTTAAAAATATAAAA 2580
QY 2885 AATGAAACAGGGTTTCAGACCAACAGTAAAGATTTACTTTTAAAGGTGAGCT 2944
DB 2581 AATGAAACAGGGTTTCAGACCAACAGTAAAGATTTACTTTTAAAGGTGAGCT 2640
QY 2945 GCCCTGTGGCCCATTTTCAAGGAAATTTTACCGGAAAGTCCCGCGTACCAACGCTCAGAA 3004
DB 2641 GCCCTGTGGCCCATTTTCAAGGAAATTTTACCGGAAAGTCCCGCGTACCAACGCTCAGAA 2700
QY 3005 AAATACCCAGCATGATGATTTAGTTAACTCTGCAAGAACCCAGCATCTGGTGAGCGGGGA 3064
DB 2701 AAATACCCAGCATGATGATTTAGTTAACTCTGCAAGAACCCAGCATCTGGTGAGCGGGGA 2760
QY 3065 GTGTAGCAACCTTACAAAGACATGTGGAGTGAAGGGCTTACATTTACTGCTAATCTCTGA 3124
DB 2761 GGCAGTAACTCTGTCAAAAGCATGTGGAGTGAAGGGCCACTTTTGTAGTGCACACTCTCTGA 2820
QY 3125 AGTGTACATTTCTTAGGCAATTTTAAATTCATATGATCCAGAGCATCATTTATAAAGTG 3184
DB 2821 ACTTGCACATTTTCCAGACAGTTTAAATTCATATGACCCAGAGCACCATTTATAAGGTG 2880
QY 3185 TTCTCTCCAGAGCTAGTAGTGCACAAATGCTAGTGGGAAAGAGGCAAAAGTGTGACT 3244
DB 2881 TTTTCTCCCGCAGCAAGTAGTGCACAAATGCTAGTGGGAAAGAGGCAAAAGTGTGACT 2940
QY 3245 ATTAGTCCCATTTAGGGTACTCTACTCGTGGAGATCTAGTATTTTAAATGCTTTAAAT 3304
DB 2941 ATTAGTCCCATTTAGGGTACTCTACTCGTGGAGATCTAGTATTTTAAATGCTTTAAAT 3000
QY 3305 TTGTTTTCTCAACCATTTAGAGTTTCAGCACTTAAATTTGAAAAATTTAGTGTAGTAGTCCA 3364
DB 3001 TTATTTTTTTCACCTTTAGAGTTTCAGCACTTAAATTTGAAAAATTTAGTGTAGTAGTCCA 3060
QY 3365 GATGCTTTAACTGTAACTATTTTCAAGAAATGCTGTAAAGATGTGCACAGCAAAACAGGA 3424
DB 3061 GATGCTTTAACTGTAACTATTTCAAGAAATGCTGTAAAGATGTGCACAGCAAAACAGGA 3120
QY 3425 GGAGGTGTGCAAGTTTACTGCACAGCACCAAGAGCTTTGTGTGTGTGTGTGTGTGTGTGTGT 3484
DB 3121 GGGGGGTACAGGTTTACTGCACAGCACCAAGAGCTTTAGTGTGTGTGTGTGTGTGTGTGTGTGT 3180
QY 3485 TATAAATACCCATATGT 3544
DB 3181 TACAAGTACCCATATGT 3240
QY 3545 TGGGTTTACTTTTCCCGCCAGTATGCTTAAACAGTAGGTGAAGTAAACACACAGGA 3604
DB 3241 TGGGTATATCTTTTCCCGCCCAATATGCTTAAACAGTAGGTGAAGTAAACACACAGGA 3300
QY 3605 ATTTCCAGGAGACAGCAAAATTTGGCTAGTGAAGATCAGCTTTTATGTTGTAGTAGCAC 3664
DB 3301 ATTTCCAGGAGACAGCAAAATTTAGCAAGTGAAGATCAGCAATTTATGTTTGTGAACAC 3360
QY 3665 AGTTCATTTGAACTTTTGGGTACAGGGGATCTGCCACTATGTCTCTACAAATTTTCCAGCT 3724
DB 3361 AGTTCATTTGAACTTTTGGGTACAGGGGATCTGCCACTATGTCTCTACAAATTTTCCAGCT 3420
QY 3725 GTGCCCCCAGAAAACCTTAGAGGCTGCAGCCAAATTTTTTATGAAATGTACAAACCTTTTG 3784
DB 3421 GTGCCCCCAGAAAATTTAGAGGCTGCAGTCAACACTTTTATGAAATGTACAAACCTTTTA 3480
QY 3785 TACGCTTCTGTTTGGGTTACTGCACATTTAGGAGGGGCCCTTAAATTTTATGATCATTTG 3844
DB 3481 TACGATTCGCTTGGGTTTCTGCACATTTAGGAGGGTGACCCAAATTTTATGATCATTTTA 3540
QY 3845 ACACAGGAAGACCCGCAATTTAGGAGGGTGACCCAAATTTTATGATCATTTTA 3904
DB 3541 ACACATGAAGACCCGCAATTTAGGAGGGTGACCCAAATTTTATGATCATTTTA 3600
QY 3905 GTGTCTCAAAAGAGGAGACAAATTTCTAATACAGGTGTGTGGAAGAGCCCTTTACGGGGCTT 3964

Job time : 18829 secs

Db	3601	GTGTCTACAAAGGAGGAGAGAGCTCTTAATACTGGAGCTGGAAGCCCTTAACAGGCTT	3660
Qy	3965	AGTACTGGCACTAGCCAAACACACAGAAATTTCCCTAGCCCGCCGCGCAGTATCTCAGCCA	4024
Db	3661	AGCAGGAGTCTCTCAAAACACTAGAAATATCTTACGCCCTGGACAGTGTCTCAGCCA	3720
Qy	4025	TACCATCACTGGGACACTGATAAATATGTTACAGGAATAATGCCATTTTCATGGACAA	4084
Db	3721	TACCACCACTGGGACACAGATACTATGTACAGGAATATACGCCATTTCTCATGGTCAG	3780
Qy	4085	ACCACTTATGGAATGCTGGAGCAAAAGAGTATCAGCAAGGGGTAGGAAGATTTCCAAAT	4144
Db	3781	ACCACTTATGGTAAACGCTGAAGCAAAAGGTATCAGCAAGGGGTAGGAATTTCCAAAT	3840
Qy	4145	GAAAGAGCAAGCTTAAAGCAGTTTACAGGCTTTAAAGTATCAGCAAGGGGTAGGAATTTCCAAAT	4204
Db	3841	GAAAGAGCAAGCTTAAAGCAGTTTACAGGCTTTAAAGTATCAGCAAGGGGTAGGAATTTCCAAAT	3900
Qy	4205	GGACCCCAACATACACAGCAAAATTTGAACGCCCTCTTATGGTGGGCTCTGTTGGAC	4264
Db	3901	GGACCCCAACATACACAGCAAAATTTGAACGCCCTCTTATGGTGGGCTCTGTTGGAC	3960
Qy	4265	AGAAGAGCTCTTCACTATCAAAAGTCAAGTGTGGAGTAAATCCCTAACTTAGATGACAGT	4324
Db	3961	AGAAGAGCTCTTCACTATCAAAAGTCAAGTGTGGAGTAAATCCCTAACTTAGATGACAGT	4020
Qy	4325	TTTAAACTCAATTTGACGCCCTAGCGGGTGGGGTTGGCATCAACCCCTCAAAATTTAGATGACAGT	4384
Db	4021	TTTAAACTCAATTTGACGCCCTAGCGGGTGGGGTTGGCATCAACCCCTCAAAATTTAGATGACAGT	4080
Qy	4385	TTTTTAAATAACTACCAAAAGTGGGCCAATTTGGAGTAAATCCCTAACTTAGATGACAGT	4444
Db	4081	TTTTTAAATAACTACCAAAAGTGGGCCAATTTGGAGTAAATCCCTAACTTAGATGACAGT	4140
Qy	4445	ACCTTTAGTCAATGCTGTGGGAATAATGACAGTATACCATGACCTTTAAATTTGGACCT	4504
Db	4141	ACCTTTAGTCAATGCTGTGGGAATAATGACAGTATACCATGACCTTTAAATTTGGACCT	4200
Qy	4505	CGAAAGGCTACTGGAAGGTGGAATCCCGAGCGTGGGTTTATCCTCTCATGCGCTGGT	4564
Db	4201	CGTAAGCTACGGGACGGTGGATCTCAACCTGGAGTATATCCCGCGCACGACGAGT	4260
Qy	4565	CATTACCATATGATCTGTATGACCCACAGCTACAGATGCAAGCAACACACACAGACAC	4624
Db	4261	CATTACCATATGATCTGTATGACCCACAGCTACAGATGCAAGCAACACACACAGACAC	4320
Qy	4625	GGATATGAAAGGCTGAAGAAATTTGAGTGTCCCAAGCCGTGTGACCCCATTTGTAACA	4684
Db	4321	GGATATGAAAGGCTGAAGAAATTTGAGTGTCCCAAGCCGTGTGACCCCATTTGTAACA	4380
Qy	4685	TTCCCCACCGTGTCTCAGCCAGGAACCGTCAACCCCGCCACCTGTGCGCCCGAGAT	4744
Db	4381	CTCCCCACCGTGTCTCAGCCAGGAACCGTCAACCCCGCCACCTGTGCGCCCGAGAT	4440
Qy	4745	ATATGTGCCCCCTCCCAATACCCGCTAGGCAACCATCTATAAAGATACAGACGCTGTAGA	4804
Db	4441	GTACCTGCCCCCTCTCTGTACCTATAGACAGCCTTAACCAAAAGATATAGACAAATGTAGA	4500
Qy	4805	ATATAAATTTAATACATGATGAAACACATGTAATTAGAATGCTAAGATTTAGTAATAT	4864
Db	4501	ATTTAAGTACTTTAACAGATATGAAACACATGTTATTAGAATGCTAAGATTTAGTAATAT	4560
Qy	4865	GTACCAAGTTTGGAAAAATAAAGCCCTTAATAAATAATTCATAGTGTATGTTCTTTA	4924
Db	4561	GTATCAAAATTTAGAAAAATAAACAATTTGTTGGTTAAAAAATATGTTGTGCGCTCT	4620
Qy	4925	AAAAATTTCAA	4935
Db	4621	AAAAATTTAAA	4631

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 20, 2004, 20:36:51 ; Search time 1743 Seconds
(without alignments)
12254.699 Million cell updates/sec

Title: US-09-555-640-1

Sequence: 1 gacgtcacaggaatgacgt.....acgtcatctccctgtgacgtc 5028

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 3373863 seqs, 2124099041 residues

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :

N_Geneseq_29Jan04:*
1: geneseqn1980s:*
2: geneseqn1990s:*
3: geneseqn2000s:*
4: geneseqn2001as:*
5: geneseqn2001bs:*
6: geneseqn2002as:*
7: geneseqn2003as:*
8: geneseqn2003bs:*
9: geneseqn2003cs:*
10: geneseqn2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query %	Length	DB	ID	Description
1	5027	100.0	5028	2	AAx81580	AAx81580 Genomic D
2	3629.4	72.2	4677	2	AAx9535	AAx9535 Human par
3	3627.6	72.1	4678	8	ABz59570	ABz59570 Human par
4	3626	72.1	4678	8	ABz59571	ABz59571 Human par
5	2343	46.6	2343	2	AAx81583	AAx81583 Erythrovi
6	2013	40.0	2013	2	AAx81581	AAx81581 Erythrovi
7	1912.6	38.0	2380	8	ABz59573	ABz59573 Human par
8	1911	38.0	2380	8	ABz59576	ABz59576 Human par
9	1868	37.2	2600	2	AAx81586	AAx81586 Erythrovi
10	1662	33.1	1662	2	AAx91321	AAx91321 Orl1 prot
11	1585.6	31.5	2016	6	AAx81584	AAx81584 Erythrovi
12	1585.6	31.5	2016	6	AAx81585	AAx81585 Erythrovi
13	1585.6	31.5	2016	6	AAx81586	AAx81586 Erythrovi
14	1585.6	31.5	2016	6	AAx81587	AAx81587 Erythrovi
15	1585.6	31.5	2016	6	AAx81588	AAx81588 Erythrovi
16	1585.6	31.5	2016	6	AAx81589	AAx81589 Erythrovi
17	1584	31.4	2049	8	ABz59572	ABz59572 Human par
18	1579.6	31.4	2049	8	ABz59573	ABz59573 Human par
19	1578	31.4	2049	8	ABz59574	ABz59574 Human par
20	1576	31.3	2016	6	AAx91320	AAx91320 NS protei
21	1576	31.3	2016	6	AAx91321	AAx91321 B19 viru
22	1576	31.3	2016	6	AAx91322	AAx91322 B19 viru
23	1576	31.3	2016	7	ABX96679	ABX96679 Nonstruct

24	1576	31.3	2016	7	ABX96534	ABX96534 DNA encod
25	1576	31.3	2016	7	ACC69255	ACC69255 B19 virus
26	1574.4	31.3	2016	6	AAx81580	AAx81580 standard; DNA; 5028 BP.
27	1327.2	26.4	1699	8	ABz59574	ABz59574 Human par
28	1327.2	26.4	1699	8	ABz59577	ABz59577 Human par
29	1319.4	26.2	2271	3	AAx81583	AAx81583 Adeno-ass
30	725	14.4	725	2	AAx81584	AAx81584 Erythrovi
31	681	13.5	681	2	AAx81585	AAx81585 Erythrovi
32	664	13.2	670	2	AAx81586	AAx81586 Erythrovi
33	582	11.6	678	6	ABK33258	ABK33258 Probe use
34	568.8	11.3	700	8	ABz59560	ABz59560 Human par
35	568.8	11.3	700	8	ABz59562	ABz59562 Human par
36	567.2	11.3	700	8	ABz59566	ABz59566 Human par
37	567.2	11.3	700	8	ABz59567	ABz59567 Human par
38	567.2	11.3	700	8	ABz59560	ABz59560 Human par
39	567.2	11.3	700	8	ABz59561	ABz59561 Human par
40	567.2	11.3	700	8	ABz59562	ABz59562 Human par
41	567.2	11.3	700	8	ABz59561	ABz59561 Human par
42	567.2	11.3	700	8	ABz59561	ABz59561 Human par
43	567.2	11.3	700	8	ABz59561	ABz59561 Human par
44	567.2	11.3	700	8	ABz59561	ABz59561 Human par
45	567.2	11.3	700	8	ABz59560	ABz59560 Human par

ALIGNMENTS

RESULT 1	AAx81580	AAx81580 standard; DNA; 5028 BP.
XX	XX	XX
AC	AAx81580;	
XX	XX	XX
DT	26-AUG-1999	(first entry)
XX	XX	XX
DE	Genomic DNA sequence of erythrovirus V9.	
XX	XX	XX
KW	Erythrovirus V9: differential diagnosis; parvovirus; infection;	
KM	erythrovirus screening; typing; immunoassay; ss.	
XX	XX	XX
OS	Erythrovirus.	
XX	XX	XX
EH	Key	Location/Qualifiers
FT	misc_feature	4891
FT		/tag= a
FT		/note= "this base represents a nucleotide missing from
FT		the sequence given in the specification. It is included
FT		to maintain the nucleotide numbering given in the
XX	XX	specification for this sequence"
XX	XX	XX
XX	FR2771751-A1.	
XX	XX	XX
PD	04-JUN-1999.	
XX	XX	XX
PF	03-DEC-1997;	97FR-00015197.
XX	XX	XX
PR	03-DEC-1997;	97FR-00015197.
XX	XX	XX
PA	(ASSI-) ASSISTANCE PUBLIQUE HOPITALAUX PARIS.	
XX	XX	XX
PI	Nguyen QT, Garbarg CA, Auguste V;	
XX	XX	XX
DR	WPI, 1999-349543/30.	
XX	XX	XX
PT	Erythrovirus V9 and its nucleic acid sequences - can be used in the	
XX	diagnosis of its infections.	
XX	Claim 1; Page 19-21; 80pp; French.	
PS	XX	XX
XX	XX	XX
CC	The present sequence represents the genomic sequence of erythrovirus V9.	
CC	Probes and primers derived from erythrovirus V9 polynucleotide sequences	
CC	(AAx81580) can be used for differential diagnosis of erythrovirus	
CC	(parovirus) infections by a combination of amplification and	

CC hybridisation assay. The probes can also be used to assess susceptibility
 CC to erythrovirus infection and for erythrovirus screening and typing. The
 CC antibodies can be used in immunoassays for diagnosis of erythrovirus V9
 CC infections
 XX

Sequence 5028 BP; 1528 A; 1010 C; 1106 G; 1383 T; 0 U; 1 Other;

Query Match 100.0%; Score 5027; DB 2; Length 5028;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 5027; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY 1 GACGTCACGGAATGACGTAACGTCGCGCCATCTTGATACCGGAAGTCCCGCTACCGGC 60
DB 1 GACGTCACGGAATGACGTAACGTCGCGCCATCTTGATACCGGAAGTCCCGCTACCGGC 60
QY 61 GCGGACCGGCGGATCTGATTTGGTCTCTCTTTTGAATTTTGGCGGCTTTTCCCG 120
DB 61 GCGGACCGGCGGATCTGATTTGGTCTCTCTTTTGAATTTTGGCGGCTTTTCCCG 120
QY 121 CCTTATGCAAAATGACGCGCATGTTTAAATGTTATTTTAAATTTTGAACAAAGCCT 180
DB 121 CCTTATGCAAAATGACGCGCATGTTTAAATGTTATTTTAAATTTTGAACAAAGCCT 180
QY 181 AACGCTTACGAGGCGGAGTTACGCGCGGTATATACGACGTCGCTCCGACACTT 240
DB 181 AACGCTTACGAGGCGGAGTTACGCGCGGTATATACGACGTCGCTCCGACACTT 240
QY 241 CTTTCTGCTGCTTTTGAATGACGTAACGTCGCTCTTCTTCTGCTGCTGACGAGT 300
DB 241 CTTTCTGCTGCTTTTGAATGACGTAACGTCGCTCTTCTTCTGCTGCTGACGAGT 300
QY 301 ATTATATCTAATCTTTTAAATTTTACTTACGATGAGGCTATTTGGGGGTCTTGCACATTTCC 360
DB 301 ATTATATCTAATCTTTTAAATTTTACTTACGATGAGGCTATTTGGGGGTCTTGCACATTTCC 360
QY 361 TCTAACATCTGAGCTGCTATGATATACGCTGCTGCTCTTACGCTGACGCTGATGATCT 420
DB 361 TCTAACATCTGAGCTGCTATGATATACGCTGCTGCTCTTACGCTGACGCTGATGATCT 420
QY 421 TCTGACCTGGGAAACCACTACCACTTCTACAGATTAATGCAATATTTTAAACAGATTT 480
DB 421 TCTGACCTGGGAAACCACTACCACTTCTACAGATTAATGCAATATTTTAAACAGATTT 480
QY 481 GCTTCTAACCTGATTTTAACTGCGGGGCGGCTAGCAGGCTGCTTAACTTTTCAAGTG 540
DB 481 GCTTCTAACCTGATTTTAACTGCGGGGCGGCTAGCAGGCTGCTTAACTTTTCAAGTG 540
QY 541 GAATGTAAACAATTTGAGGAAGCTATCATATCATATGATGATGATGATGATGATGATGAT 600
DB 541 GAATGTAAACAATTTGAGGAAGCTATCATATCATATGATGATGATGATGATGATGATGAT 600
QY 601 AATGCTAGAACTTAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
DB 601 AATGCTAGAACTTAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
QY 661 GTAATGAAAGTGTAACTTAAATTTTGGCAGGAGTACGAAAGAAATTTT 720
DB 661 GTAATGAAAGTGTAACTTAAATTTTGGCAGGAGTACGAAAGAAATTTT 720
QY 721 AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 780
DB 721 AGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 780
QY 781 TGGTGTGTAAACAATTTGACGCGGTATATGACACCTGATTTTCCGCTTTTGGGGA 840
DB 781 TGGTGTGTAAACAATTTGACGCGGTATATGACACCTGATTTTCCGCTTTTGGGGA 840
QY 841 GGAAGCTTGTATGCTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 900
DB 841 GGAAGCTTGTATGCTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 900
QY 901 ACTGGGAGATCTAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 960
DB 901 ACTGGGAGATCTAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 960

```

```

DB 901 ACTGGGAGATCTAGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 960
QY 961 GCGGAGTTAAAGTTTCAACCAAGTAAATGGCTATGAGAAACAGAGATTTACTGAA 1020
DB 961 GCGGAGTTAAAGTTTCAACCAAGTAAATGGCTATGAGAAACAGAGATTTACTGAA 1020
QY 1021 GATTAATGAAATTAAGTGAATTTTAAACAATATCTTTATTAAGTACGACGACAGTGC 1080
DB 1021 GATTAATGAAATTAAGTGAATTTTAAACAATATCTTTATTAAGTACGACGACAGTGC 1080
QY 1081 AGCTTCAATTTAAAGTGTCTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAA 1140
DB 1081 AGCTTCAATTTAAAGTGTCTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAAAGTTTAA 1140
QY 1141 ACTAGTACATCTTGTATACATGACGCTTGAAGGAGTACTGATTAAGAAATTA 1200
DB 1141 ACTAGTACATCTTGTATACATGACGCTTGAAGGAGTACTGATTAAGAAATTA 1200
QY 1201 ATATGTAATTTATTTGCTGAAACCTATGATCCCTTTTATGAGGCTCAACATGCTT 1260
DB 1201 ATATGTAATTTATTTGCTGAAACCTATGATCCCTTTTATGAGGCTCAACATGCTT 1260
QY 1261 AGGTGATTTGACAAAAATGCTTAAAAAACAACCTGCTGTTTACGGGCAACAAAGT 1320
DB 1261 AGGTGATTTGACAAAAATGCTTAAAAAACAACCTGCTGTTTACGGGCAACAAAGT 1320
QY 1321 ACTGAAAAACAATTTGGCAATGCTATGCTTAAACGTAACAGTATGAAATGCTG 1380
DB 1321 ACTGAAAAACAATTTGGCAATGCTATGCTTAAACGTAACAGTATGAAATGCTG 1380
QY 1381 AATGGAATTAATGAAACCTTCCATTTTATGATGATGAGGGAAGTTTGTGCTG 1440
DB 1381 AATGGAATTAATGAAACCTTCCATTTTATGATGATGAGGGAAGTTTGTGCTG 1440
QY 1441 GATGAAGCATTTATTAAGTCACTATTTGAGAGCTGCAAAAGCAATTTAGGCTGAG 1500
DB 1441 GATGAAGCATTTATTAAGTCACTATTTGAGAGCTGCAAAAGCAATTTAGGCTGAG 1500
QY 1501 CCAACAGAGTAAAGTCAAAATGCTGAGCTGAGTGGAGTGGCTGCTGCTG 1560
DB 1501 CCAACAGAGTAAAGTCAAAATGCTGAGCTGAGTGGAGTGGCTGCTGCTG 1560
QY 1561 ATTAACAGCAATGCTGACATTAATTTGCTGAGTGAATTAACATTAACATGCTGAT 1620
DB 1561 ATTAACAGCAATGCTGACATTAATTTGCTGAGTGAATTAACATTAACATGCTGAT 1620
QY 1621 GCTAAAGCTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1680
DB 1621 GCTAAAGCTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1680
QY 1681 ATGGGTTTACTTACAGAGGCTGATGATCAACATGCTAATGCTGATATGCAAAAGC 1740
DB 1681 ATGGGTTTACTTACAGAGGCTGATGATCAACATGCTAATGCTGATATGCAAAAGC 1740
QY 1741 TGAAGCACTATGAAACTGCGCAATTAACATTAATTTTCCCTGGAATTAATGCA 1800
DB 1741 TGAAGCACTATGAAACTGCGCAATTAACATTAATTTTCCCTGGAATTAATGCA 1800
QY 1801 GATGCTCCCAACCAAGATCTCCCAACCAACCAACCAACCAACCAACCAACCAACCAAC 1860
DB 1801 GATGCTCCCAACCAAGATCTCCCAACCAACCAACCAACCAACCAACCAACCAACCAAC 1860
QY 1861 AGTGTGTGTAAGGCTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1920
DB 1861 AGTGTGTGTAAGGCTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1920
QY 1921 GCGGCTTGAACAGTGAACCCGCGCTCTAGTACGCTCCCGGAGCAAGTTCAAGA 1980
DB 1921 GCGGCTTGAACAGTGAACCCGCGCTCTAGTACGCTCCCGGAGCAAGTTCAAGA 1980
QY 1981 GAATCAATTTGTGGAAGCCAGTTTCTCGAAGTGTAGCCGCTGCTGGAAGAGAGT 2040
DB 1981 GAATCAATTTGTGGAAGCCAGTTTCTCGAAGTGTAGCCGCTGCTGGAAGAGAGT 2040

```

QY 2041 TTTTACACGCGCTGCGCATGCTTTCGGAACGTGTATAGAGGGGTGACTTGTATGG 2100
DB 2041 TTTTACACGCGCTGCGCATGCTTTCGGAACGTGTATAGAGGGGTGACTTGTATGG 2100
QY 2101 GATGCTGTGAGGGGATTTGCTGTGTGTGTGTGGAACATATAAACAACAGTGGGGAGGG 2160
DB 2101 GATGCTGTGAGGGGATTTGCTGTGTGTGTGTGGAACATATAAACAACAGTGGGGAGGG 2160
QY 2161 TTGGGGCTTTGCGCTCATGTATTAATGTGGAGCTTGGTATATAGATGAATTTAGA 2220
DB 2161 TTGGGGCTTTGCGCTCATGTATTAATGTGGAGCTTGGTATATAGATGAATTTAGA 2220
QY 2221 GAGTTTACTCCAGACTTATAGCGCTGAGTGTCACTGATAGAGCCCTTAAACCATTTCT 2280
DB 2221 GAGTTTACTCCAGACTTATAGCGCTGAGTGTCACTGATAGAGCCCTTAAACCATTTCT 2280
QY 2281 GTGTAACTTGTATTAATAATGTGCTTACCTGTCTGATTAACAAGTTTGTATATAG 2340
DB 2281 GTGTAACTTGTATTAATAATGTGCTTACCTGTCTGATTAACAAGTTTGTATATAG 2340
QY 2341 TAAACCACTAACAAATGTGGGAAAGCAGTGAACAATTTGCCAGAGCGTGTATAGCA 2400
DB 2341 TAAACCACTAACAAATGTGGGAAAGCAGTGAACAATTTGCCAGAGCGTGTATAGCA 2400
QY 2401 GTTTGTGCAATTTTATGAAAAGCTACTGGAACAGACTTATAGCTTATTAATTTTAA 2460
DB 2401 GTTTGTGCAATTTTATGAAAAGCTACTGGAACAGACTTATAGCTTATTAATTTTAA 2460
QY 2461 AGACCACTAACAAATTTCTTATAGTATCTTTAGAAAACCCCTCTTCTTATTTGACTT 2520
DB 2461 AGACCACTAACAAATTTCTTATAGTATCTTTAGAAAACCCCTCTTCTTATTTGACTT 2520
QY 2521 AGTTGCTCGATTAAAGTATCTTTAAAACTCTCCAGACCTTATATAGTATCAATTTCA 2580
DB 2521 AGTTGCTCGATTAAAGTATCTTTAAAACTCTCCAGACCTTATATAGTATCAATTTCA 2580
QY 2581 GAGCCATGACACTTATCTGACCAACCCCTTATCATCCAGTAAACAGTGTGAGA 2640
DB 2581 GAGCCATGACACTTATCTGACCAACCCCTTATCATCCAGTAAACAGTGTGAGA 2640
QY 2641 ACCTAGAGGAAATGACATGATTTATCTAGTGAAGACTTACACAAGCTGGGCAAGTTAG 2700
DB 2641 ACCTAGAGGAAATGACATGATTTATCTAGTGAAGACTTACACAAGCTGGGCAAGTTAG 2700
QY 2701 CATACATTAACCCGGTACTTAACTATGTGGGCTGGCAATGAGCTACAACTGGGCTCC 2760
DB 2701 CATACATTAACCCGGTACTTAACTATGTGGGCTGGCAATGAGCTACAACTGGGCTCC 2760
QY 2761 GCGAATGCTGTGACAGTGTCTGACAGAGATTCACTTATAGTATAGCCAAATTTGCTTA 2820
DB 2761 GCGAATGCTGTGACAGTGTCTGACAGAGATTCACTTATAGTATAGCCAAATTTGCTTA 2820
QY 2821 GTTGGGAATTAATCTTATACACTTGTGACAGTGTGAGAGATTTGTTAAAAATAT 2880
DB 2821 GTTGGGAATTAATCTTATACACTTGTGACAGTGTGAGAGATTTGTTAAAAATAT 2880
QY 2881 AAAAATGAAACAGGTTTCAAGCACAAGCAGTAAAGATTACTTTTAAAAAGGTGC 2940
DB 2881 AAAAATGAAACAGGTTTCAAGCACAAGCAGTAAAGATTACTTTTAAAAAGGTGC 2940
QY 2941 AGCTGCCCTGTGCGCCATTTTCAAGGAAGTTTACCGGAAGTGCCTGGCTACACGCTTC 3000
DB 2941 AGCTGCCCTGTGCGCCATTTTCAAGGAAGTTTACCGGAAGTGCCTGGCTACACGCTTC 3000
QY 3001 AGAAAAATACCCAGCAGTGACTTCACTTAACTCTGAGAAAGCAGCACTGTGTCAAGCGG 3060
DB 3001 AGAAAAATACCCAGCAGTGACTTCACTTAACTCTGAGAAAGCAGCACTGTGTCAAGCGG 3060
QY 3061 GGGAGGTAGCAACCTTACAAAAAGCATGTGAGTGAAGGGGCTTACATTTTCTGTATTTT 3120
DB 3061 GGGAGGTAGCAACCTTACAAAAAGCATGTGAGTGAAGGGGCTTACATTTTCTGTATTTT 3120

QY 3121 TGTAACTGTACATCTCTAGCAATTTTAAATTCATATGATCCAGACATCATTTATA 3180
DB 3121 TGTAACTGTACATCTCTAGCAATTTTAAATTCATATGATCCAGACATCATTTATA 3180
QY 3181 AGTTTCTCTCCAGCAGCTAGTACCTGCGCAAAATGTAGTGGAAAGAGCAAAAGTGTG 3240
DB 3181 AGTTTCTCTCCAGCAGCTAGTACCTGCGCAAAATGTAGTGGAAAGAGCAAAAGTGTG 3240
QY 3241 CACTATTAAGTCCCATTAATGGGGTACTTACTCCGTGGAATATCTTATGATTTTAAATGCTTT 3300
DB 3241 CACTATTAAGTCCCATTAATGGGGTACTTACTCCGTGGAATATCTTATGATTTTAAATGCTTT 3300
QY 3301 AAATTTGTTTCTCAGCAATTAAGTGTAGAGCTTAAATTTGAAATTAATGTATAGTAC 3360
DB 3301 AAATTTGTTTCTCAGCAATTAAGTGTAGAGCTTAAATTTGAAATTAATGTATAGTAC 3360
QY 3361 TCCAGATGCTTTAACTGTATCTATTTTCAAGAAATGTGTAAAGATGTCAACAGCAAAAC 3420
DB 3361 TCCAGATGCTTTAACTGTATCTATTTTCAAGAAATGTGTAAAGATGTCAACAGCAAAAC 3420
QY 3421 AGAAGAGGTGTGCAAGTTACTGACAGCACACAGAGCGTTGTGTATGTATGATGATCA 3480
DB 3421 AGAAGAGGTGTGCAAGTTACTGACAGCACACAGAGCGTTGTGTATGTATGATGATCA 3480
QY 3481 TGAGTATTAATCCCATATGTGTAGGTGAGGGGCAAGACACACTAGCTCCAGAACTGCC 3540
DB 3481 TGAGTATTAATCCCATATGTGTAGGTGAGGGGCAAGACACACTAGCTCCAGAACTGCC 3540
QY 3541 CATTTGGGTTTACTTTCCCCCAGATATGCTTACTTAAAGTATGTGATTAATTTTCA 3600
DB 3541 CATTTGGGTTTACTTTCCCCCAGATATGCTTACTTAAAGTATGTGATTAATTTTCA 3600
QY 3601 AGGAATTTCAAGACACAGCAAAATTTGCTAGTGAAGATCACTTTTATGTGTAGA 3660
DB 3601 AGGAATTTCAAGACACAGCAAAATTTGCTAGTGAAGATCACTTTTATGTGTAGA 3660
QY 3661 GCAAGTTTCAAGTGAAGCTTTTGGGTACAGGGGAGTGTGCACTATGCTTCAAAATTTCC 3720
DB 3661 GCAAGTTTCAAGTGAAGCTTTTGGGTACAGGGGAGTGTGCACTATGCTTCAAAATTTCC 3720
QY 3721 AGCTGTGCCCCAGAAAACCTAGAAAGCTGACAGCCAAATTTTATGAAATGTACAAACC 3780
DB 3721 AGCTGTGCCCCAGAAAACCTAGAAAGCTGACAGCCAAATTTTATGAAATGTACAAACC 3780
QY 3781 TTTGTACGGTTCCTTTAGGGGTACTCTGACACATTTAGAGAGGAGCCCTTAATTTAGATC 3840
DB 3781 TTTGTACGGTTCCTTTAGGGGTACTCTGACACATTTAGAGAGGAGCCCTTAATTTAGATC 3840
QY 3841 ATTGACACAGAAAGACAGCAATTTGAGCCACAAAATTTATGCTTGGGCACTAATTA 3900
DB 3841 ATTGACACAGAAAGACAGCAATTTGAGCCACAAAATTTATGCTTGGGCACTAATTA 3900
QY 3901 TTCAGTGTCTACCAAAAGAGAGCAATTTCTAATACAGGTGCTGAAAAGCCCTTACGGG 3960
DB 3901 TTCAGTGTCTACCAAAAGAGAGCAATTTCTAATACAGGTGCTGAAAAGCCCTTACGGG 3960
QY 3961 GCTTATGACTGTGCACTAGCCAAAACACAGAAATTTCCCTACGCCCGGGGCACTATCTCA 4020
DB 3961 GCTTATGACTGTGCACTAGCCAAAACACAGAAATTTCCCTACGCCCGGGGCACTATCTCA 4020
QY 4021 GGCATACCATCTCTGGGACACTGATTAATGTGTAAGGAATTAATGCAATTTTCAATGG 4080
DB 4021 GGCATACCATCTCTGGGACACTGATTAATGTGTAAGGAATTAATGCAATTTTCAATGG 4080
QY 4081 ACAAAACACTTATGAAATGTCTGAGACAAAGAGTATCAGCAAGGGGTAGGAAGATTTCC 4140
DB 4081 ACAAAACACTTATGAAATGTCTGAGACAAAGAGTATCAGCAAGGGGTAGGAAGATTTCC 4140
QY 4141 AAATGAAAAAGAACAGCTTAAAGCATTTAAAGTCTTAAATGCAACATCTTCCCTTA 4200
DB 4141 AAATGAAAAAGAACAGCTTAAAGCATTTAAAGTCTTAAATGCAACATCTTCCCTTA 4200
QY 4201 TAAAGAACCCCAACATATACAGCAACCAATTTAGACCCCTCTTATGTGTGGGCTCTGTGG 4260

Db	4201	TAAAGAACCCACAAATACAGAACAAATGTAACCCCTCTTAATGATGGGCTCTGTTGG	4260
Qy	4261	GAACAGAAAGCTCTTCACTATGATAAAATGACGTGTGATGTAATAATCCCTTAATTGATGTA	4320
Db	4261	GAACAGAAAGCTCTTCACTATGATAAAATGACGTGTGATGTAATAATCCCTTAATTGATGTA	4320
Qy	4321	CAGTTTAAAAATCCATTTGGAGCCCTTAGCCGGGTGGGTTTGATCAACCAACCCCTCA	4380
Db	4321	CAGTTTAAAAATCCATTTGGAGCCCTTAGCCGGGTGGGTTTGATCAACCAACCCCTCA	4380
Qy	4381	AATATTTTAAAAATCTAACCAAGTGGGCCAATTGGAGGTATTTAATCATGGGAAT	4440
Db	4381	AATATTTTAAAAATCTAACCAAGTGGGCCAATTGGAGGTATTTAATCATGGGAAT	4440
Qy	4441	TATCTACTTAGTTCATATGCTGTGGGAATTAATGACGTACATGACCTTTAAATTTGG	4500
Db	4441	TATCTACTTAGTTCATATGCTGTGGGAATTAATGACGTACATGACCTTTAAATTTGG	4500
Qy	4501	ACCTCGAAAGGCTACTCGAAGGTGGAATCCCGAGCTGGCGTTTATCCTCCTCATGAC	4560
Db	4501	ACCTCGAAAGGCTACTCGAAGGTGGAATCCCGAGCTGGCGTTTATCCTCCTCATGAC	4560
Qy	4561	TGGTCAATTTACCATATGTAATCTGTATGACCCCAACAGCTACAGATCAAGTCAAAAGCAACACAG	4620
Db	4561	TGGTCAATTTACCATATGTAATCTGTATGACCCCAACAGCTACAGATCAAGTCAAAAGCAACACAG	4620
Qy	4621	ACACGGATATGAAAAAGCTGAAAGATTTGTGATCGCCAAAGCCGTGTGACCCCATTTGTA	4680
Db	4621	ACACGGATATGAAAAAGCTGAAAGATTTGTGATCGCCAAAGCCGTGTGACCCCATTTGTA	4680
Qy	4681	AACATTTCCCAACCGTGTCTTCAAGCCAGAACCGTTCACCCACCGGCCAACCCTGTGCCGCCA	4740
Db	4681	AACATTTCCCAACCGTGTCTTCAAGCCAGAACCGTTCACCCACCGGCCAACCCTGTGCCGCCA	4740
Qy	4741	GATTATATGTGCCCCCTCCAATACCCCGTAGGCAACATCTATTAAGATATACAGACGCTG	4800
Db	4741	GATTATATGTGCCCCCTCCAATACCCCGTAGGCAACATCTATTAAGATATACAGACGCTG	4800
Qy	4801	TAGAAATTAATTAATTTTAACTAGATATGAAACAACATGTAATTAGATGCTAAAGATTATGTA	4860
Db	4801	TAGAAATTAATTAATTTTAACTAGATATGAAACAACATGTAATTAGATGCTAAAGATTATGTA	4860
Qy	4861	ATATGTACACAAGTTTGGAAAAATTAAGAGCTTAAATTAATTAATCAATGTATGATGTTTC	4920
Db	4861	ATATGTACACAAGTTTGGAAAAATTAAGAGCTTAAATTAATTAATCAATGTATGATGTTTC	4920
Qy	4921	TTTAAAAATTTCAAAAAGAAACAACCAATCAAGTGCAGCGTCCGCCCGCGTAGCGGG	4980
Db	4921	TTTAAAAATTTCAAAAAGAAACAACCAATCAAGTGCAGCGTCCGCCCGCGTAGCGGG	4980
Qy	4981	GACTTCCGGTACAAAGATGGCGGACAGTTAGTCAATTTCCCTGTGACGTC	5028
Db	4981	GACTTCCGGTACAAAGATGGCGGACAGTTAGTCAATTTCCCTGTGACGTC	5028

RESULT 2	
AAT49535	
ID	AAT49535 standard; DNA; 4677 BP.
XX	

DT	27-AUG-2003	(revised)
DT	26-FEB-1997	(first entry)
XX		

Human parvovirus genome fragment.

KM Human coronavirus genome: structural gene: VP-1, VP2, arthritis;
 KM non-structural protein: NS; diagnosis: vaccine; parvoviral disease;
 KM erythroblastemia; abortion; universal fetal hydrops; liver disease;
 KM haemorrhagic fever; rheumatism: detection; IgG antibody; ds.
 XX

OS B19 virus.

XX	Location/Qualifiers
Key	223..2237
PH	/*tag= c
FT	/product= "NS_protein"
FT	2230..4575
FT	/tag= a
FT	/product= "VP1"
FT	2511..4575
FT	/tag= b
FT	/product= "VP2"
XX	

```
/product= "VP2"
```

PN JP07147986-A.

PD 13-JUN-1995.

PF 24-SEP-1992; 92JP-00281017.

PR 24-SEP-1992; 92JP-00281017.
XX

PA (ELED) DENKI KAGAKU KOGYO KK.
PA (DENR) DENKI KAGAKU KOGYO KK.

XX
DB
WDT : 100F 0405F5C/200

LR E-PSDB; AAW08986, AAW08987, AAW08988.
YY

Human parvovirus gene coding for a polypeptide - useful for developing vaccines against

PT haemorrhagic fever, etc.
XY

PS Claim 1; Page 2-5; 38pp; English.
XX

This sequence represents a fragment of the human parvovirus genome which encodes the parvovirus structural genes VP-1 and VP-2, and the non-structural protein, NS. This coding sequence may be used for the diagnosis and development of vaccines for parvoviral diseases including erythroid aplasia, abortion, universal fetal hydrops, liver diseases, haemorrhagic fever, arthritis and rheumatism. The VP-1 and VP-2 proteins may be used to detect parvovirus IGG antibodies. (Updated on 27-Aug-2003 to correct OS field.)

sequence 4677 BP; 1430 A; 931 C; 1030 G; 1277 T; 0 U; 9 Other;

Query Match	72.2%;	Score 3629.4;	DB 2;	Length 4677;
Best Local Similarity	86.1%;	Pred NO.	0.	

Matches 4023; conservative 7; Mismatches 633; Indels 8; Gaps 1;

115 TCCGCTTATGCAATAAGCGCCATGTTTATGTTATATTTTAAATTGACAA 17

1 TCCGCTTATGCAATGGCAGCCATTTAAGTGTTTACTATAATTATTTGGTCAG 60

27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047 1048 1049 1050 1051 1052 1053 1054

.....GAGCCTACAGTATATATAGCACCGCA 120

286

 CCGGCTGGCCTTCCAGACATTCCTGCGCTTTTGTGA 180

346

.....GAGCTAATTAGAGGG 240

406

[illegible]

466

[illegible]

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99

[illegible]

QY	1607	CTAACACTGTCAGTCTGTAAGCCCTTAAAGAGCGAATGTTAAAGCTTAACTTTACCTAA	1666
Db	1501	CAACAACTGTACATAGCTTAAAGCCCTTAAAGAGCGCAAGTTAAAGTTAACTTTAACTGTAA	1560
QY	1667	GATGTAGCCCTCGACATGAGGTTTAACTTACAGAGGCTAGTGTAAACAACATGGCTAACTTGGT	1726
Db	1561	GATCAGCCCTGACATGAGGTTTAACTTAAACAGAGGCTAGTGTAAACAACATGGCTTAACTGGT	1620
QY	1727	GTAAATGCAAAAGCTGAGGCCACTATGAAAACTGGGCAATAACTACACATTTGATTTCC	1786
Db	1621	GTAAATGCAAAAGCTGGGACCACTATGAAAACTGGGCAATAACTACACTTTTGAATTTCC	1680
QY	1787	CTGGAATTAATGCAAGATGCCCTCCACCCAGATCTCCAAACACCCCACTGTGCCAACA	1846
Db	1681	CTGGAATTAATGCAAGATGCCCTCCACCCAGACCTCCAAACACCCCAATTTGTCAACAGACA	1740
QY	1847	CCAGTATCAGAGAGTGTGTGTGAAGAGCTGTGAAGAACTCAGTGAAGAGAGCTTTTCA	1906
Db	1741	CCAGTATCAGAGAGTGTGTGTGAAGAGCTGTGAAGAACTCAGTGAAGAGAGCTTTTITTA	1800
QY	1907	ACCTCATCACTCCAGAGCGCTGGAACAGTGAACCCCGCGCTCAGTAAAGCCGCCCTCCCG	1966
Db	1801	ACCTCATCACTCCAGAGCGCGCTGGAACACTGAACACCCCGCGCTCTAGTAAAGCCCATCCCG	1860
QY	1967	GGACCAAGTTCAGAGAAATCAATTTGTGGAAGCCCAAGTTTCTCCGAAGTGTAGCCCGT	2026
Db	1861	GGACCAAGTTCAGAGAAATCAATTTGTGCGAAGCCCAAGTTTCTCCGAAGTGTAGCTCAT	1920
QY	2027	CGTGGAGGAAGCTTTTAAACCGCGCTTGGCCATCAAGTTTCGTGAACCTGTAGTAAAGG	2086
Db	1921	CGTGGAGGAAGAGCTTTCTACACACTTTGGAGACAGATTTCCGMACTGTAGTAAATGGGG	1980
QY	2087	TTGACTTTGTATGGAATGTGTGTGAGGGGAATTCGCTGTTGCTGTGTGGAACATTAACA	2146
Db	1981	TTGATTAATGTGTGGAACGAGTGTAAAGGGGTTTACCTGTGTGTGTGTGTGCAACATTAACA	2040
QY	2147	ACAGTGGGGAGGGGTTGGGGCTTTCGCCCTCATGTTAAATGTGGGAGCTTGTATATAG	2206
Db	2041	ATAAGTGGGGAGGGCTTGGGACTTTGTGCCCATGTCATTAATGTAGGGGCTTGGTATATAG	2100
QY	2207	GATGGAATTTAAGAGAGTTTACTCCAACTTAATGTGCGCTGCAGTTGTCAATGTAGAGGCT	2266
Db	2101	GATGGAATTTGAGAAATTTAACCCCAATTTGGTGGCGGTGTAGCTGCACATGTGGAGACTT	2160
QY	2267	CTAACCCATTTTCGTGTAACTGTGAATAAATGTGCTAACCTGTCTGAAATTAACAAGTT	2326
Db	2161	CTAAATCCCTTTTCGTGTAACTGTGCAAAAAATGTGCTAACCTGTCTGAAATGCAAAAGCT	2220
QY	2327	TTGTAGATTTATGATGAATAAACACACTAAACAAATGTGTGGGAAAGACAGTGAACAAATTTGCCAG	2386
Db	2221	TTGTAGATTTATGATGAATAAAGAAAGTGGCAAAATGTGTGGGAAAGTGAATATAATTTGCTTAA	2280
QY	2387	GACGTGTAAAGCAGTTTGTGCAAATTTTATGAAAAAGCTTACCTGACACAGACTTAAAGCTT	2446
Db	2281	GCTGTGTATCAGCAATTTGTGGAATTTTATGAAAAAGTTTACTGTGMAACAGACTTAAAGCTT	2340
QY	2447	ATTGAAATTTTAAAGACACTTAACAACATTTCTTAAATATCCTTTTAAAGAAACCCCTCT	2506
Db	2341	ATTGAAATTTTAAAGATCATTTAAATATTTCTTTAAATATCCTCTTAAAGAAACCCCATCC	2400
QY	2507	TCTTTAATTTGACTAGTGTGCTGCATTTAAAGATATCTTAAAAAGCTTCCAGACTTAAT	2566
Db	2401	TCTCTGTTTAACTTAAAGTGTGCTGCATTTAAATATCCTTTAAAAAGCTTCCAGACTTAATAT	2460
QY	2567	AGTCATCATTTTCAAGCCATGACAGATTAATCTGACACACCCCAATGCTTTATCATCCAGT	2626
Db	2461	AGTCATCATTTTCAAAAGTCATGACAGATTAATCTGACACACCCCAATGCTTTATCATCCAGT	2520
QY	2627	AAACGTATGTGAAACCTTAAGAGGAAATATGCAATTAATCTATAGTGAAGACTTAACAAG	2686
Db	2521	AGCAGTATATGCAAACTTAAGAGGAAATATGCAATTAATCTATAGTGAAGACTTAACAAG	2580

QY 2687 CCTGGGCAAGTTAGCATATACCGGAGTACTATATGTTGGGCTTGCAATGACTA 2746
 Db 2581 CCTGGGCAAGTTAGCATATACCGGAGTACTATATGTTGGGCTTGCAATGACTA 2640
 QY 2747 CAAGCTGGGCTCGGCAAGTGTGTGAGACAGTGTGCAAGATTCATGACTTATAGTAT 2806
 Db 2641 CAAGCTGGGCTCGGCAAGTGTGTGAGACAGTGTGCAAGATTCATGACTTATAGTAT 2700
 QY 2807 AGCCAAATTTGGCTAAGTTGGGAATTAATCCCTTAATCACTTGAACGGGTACAGATGAAGA 2866
 Db 2701 AGCCAAATTTGGCTAAGTTGGGAATTAATCCCTTAATCACTTGAACGGGTACAGATGAAGA 2760
 QY 2867 TTTGTAATAAATATATAAATAAGAACTGGGTTTCAAGCAACAAGATTAAGTAACTTT 2926
 Db 2761 CTTTAAATAAATATATAAATAAGAACTGGGTTTCAAGCAACAAGATTAAGTAACTTT 2820
 QY 2927 ACTTTAAAGTGCAGCTGCGCTGCGCTGCGCTGCGCTGCGCTGCGCTGCGCTGCGCT 2986
 Db 2821 ACTTTAAAGTGCAGCTGCGCTGCGCTGCGCTGCGCTGCGCTGCGCTGCGCTGCGCT 2880
 QY 2987 GCGTACAAAGCTCAGAAAAATATCCCAAGATGACTTCACTTCACTTCACTTCACTTCACTT 3046
 Db 2881 GCGTACAAAGCTCAGAAAAATATCCCAAGATGACTTCACTTCACTTCACTTCACTTCACTT 2940
 QY 3047 ACTGGGCAAGGCGGCGGAGTGAACCTTCAAAAGATGTGAGTGAAGGCGCTACA 3106
 Db 2941 ACTGGGCAAGGCGGCGGAGTGAACCTTCAAAAGATGTGAGTGAAGGCGCGCACT 3000
 QY 3107 TTTACTGCTAATTCGTATACGTATCTCTCTAGGCAATTTTAAATTCCTATAGTACA 3166
 Db 3001 TTTACTGCTAATTCGTATACGTATCTCTCTAGGCAATTTTAAATTCCTATAGTACA 3060
 QY 3167 GAGCATCATTAATTAAGTGTCTCTCAGAGCTAGTACCTGCAAAATGCTAGTGGAAA 3226
 Db 3061 GAGCATCATTAATTAAGTGTCTCTCAGAGCTAGTACCTGCAAAATGCTAGTGGAAA 3120
 QY 3227 GAGGCAAAAGTGTGACTATAGTCCCTATATGGGATCTCTATCCGTGGAATACTTA 3286
 Db 3121 GAGGCAAAAGTGTGACTATAGTCCCTATATGGGATCTCTATCCGTGGAATACTTA 3180
 QY 3287 GATTTTAATGCTTAAATTTGTTTCTCAACATTAAGTTGAGCACTTAAATGAAAAAT 3346
 Db 3181 GATTTTAATGCTTAAATTTGTTTCTCAACATTAAGTTGAGCACTTAAATGAAAAAT 3240
 QY 3347 TATGATGATAGTCTCAGATGCTTAACTGTAATCTTCAAAATTTGCTGTAATAAGAT 3406
 Db 3241 TATGATGATAGTCTCAGATGCTTAACTGTAATCTTCAAAATTTGCTGTAATAAGAT 3300
 QY 3407 GTGACACAAACAGAGAGAGGTGTGCAAGTTACTGACAGCAACAAGAGCTTGTGT 3466
 Db 3301 GTGACACAAACAGAGAGAGGTGTGCAAGTTACTGACAGCAACAAGAGCTTGTGT 3360
 QY 3467 ATGTTAGTATGATGATGATTAATTAATCCCAATGCTAGTCAAGGACAGACACTTA 3526
 Db 3361 ATGTTAGTATGATGATGATTAATTAATCCCAATGCTAGTCAAGGACAGACACTTA 3420
 QY 3527 GCTCCGAGTATGCTCAATTTGGGTTTACTTTCCCTCAGATGCTTAACTTAACTAGTGT 3586
 Db 3421 GCTCCGAGTATGCTCAATTTGGGTTTACTTTCCCTCAGATGCTTAACTTAACTAGTGT 3480
 QY 3587 GAAGTAAACACACAGAGATTTCAAGGACAGCAAAAAATTTGGCTAGTGAAGATCACT 3646
 Db 3481 GAAGTAAACACACAGAGATTTCTGAGACAGCAAAAAATTTGAAGTGAAGATCACT 3540
 QY 3647 TTTTATGTTGAGACAGTTCATTTGAACTTTGGGTCAGGAGGATGCGCACTATG 3706
 Db 3541 TTTTATGTTGAGACAGTTCATTTGAACTTTGGGTCAGGAGGATGCGCACTATG 3600
 QY 3707 TCTTCAAAATTTCCAGCTGCTGCGGCAAAAACTTGAAGGCTGACGCAACATTTTAT 3766
 Db 3601 TCTTCAAAATTTCTTCCAGCTGCTGCGGCAAAAAATTTGAAGGCTGACGCAACATTTTAT 3660
 QY 3767 GAATGTACAACTTTGTAGCGTTCTGTTAAGGATGACTGACATTAAGAGGAGAC 3826

Db 3661 GAATGTACAACTTTGTAGCGTTCTGTTAAGGATGACTGACATTAAGAGGATGAC 3720
 QY 3827 CTTAATTTAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3886
 Db 3721 CTTAATTTAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3780
 QY 3887 GGGGCACTAATTAATTTCAAGTGTCTTACCAAAAGAGACAAATTTTAATACAGTGTGGA 3946
 Db 3781 GGGGCACTAATTAATTTCAAGTGTCTTACCAAAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3840
 QY 3947 AAAGCCTTAACGAGGCTTATGATGCTGACATGACCAAAACAGCAATTTCCCTAGGCCC 4006
 Db 3841 AAAGCCTTAACGAGGCTTATGATGCTGACATGACCAAAACAGCAATTTCCCTAGGCCC 3900
 QY 4007 GGGGCACTAATTTCAAGGCTTATGATGCTGACATGACCAAAACAGCAATTTATGATGATGAT 4066
 Db 3901 GGGGCACTAATTTCAAGGCTTATGATGCTGACATGACCAAAACAGCAATTTATGATGATGAT 3960
 QY 4067 GCGATTTCAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 4126
 Db 3961 GCGATTTCAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 4020
 QY 4127 GTAGAGAGATTTCCCAATTAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAA 4186
 Db 4021 GTAGAGAGATTTCCCAATTAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAA 4080
 QY 4187 ACATATCTTCCCTAATTAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAG 4246
 Db 4081 ACATATCTTCCCTAATTAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAG 4140
 QY 4247 GTGGGCTCTGTTTGAACAGAAAGAGCTTTCAATTAAGAAAGAGTGAAGTGAAGTGAAGTGA 4306
 Db 4141 GTGGGCTCTGTTTGAACAGAAAGAGCTTTCAATTAAGAAAGAGTGAAGTGAAGTGAAGTGA 4200
 QY 4307 CCTAATTTAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 4366
 Db 4201 CCTAATTTAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 4260
 QY 4367 CAGCAGCCCTCCTAATTAATTTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4426
 Db 4261 CAGCAGCCCTCCTAATTAATTTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4320
 QY 4427 AAATCAATGGAATTAATTAATTTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4486
 Db 4321 AAATCAATGGAATTAATTAATTTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4380
 QY 4487 ACCTTTAATTTGAGACCTGAAAGGCTATGAAAGTGAATCCCAAGCTGAGCTTAT 4546
 Db 4381 ACCTTTAATTTGAGACCTGAAAGGCTATGAAAGTGAATCCCAAGCTGAGCTTAT 4440
 QY 4547 CCTCTCATGACAGCTGCTGCTTAACTAATGATGATGATGATGATGATGATGATGATGATGATGAT 4606
 Db 4441 CCTCTCATGACAGCTGCTGCTTAACTAATGATGATGATGATGATGATGATGATGATGATGATGAT 4500
 QY 4607 AAGCAACACCAAGACAGAGATGAAAGAGCTGAAGATTTGAGATGAGCAAAAGCCGT 4666
 Db 4501 AAGCAACACCAAGACAGAGATGAAAGAGCTGAAGATTTGAGATGAGCAAAAGCCGT 4560
 QY 4667 GTGACACCAATTTGAAATTTCCCAACCGTGTCTTCAAGCAGAGAACCGTCAACCGCC 4726
 Db 4561 GTGACACCAATTTGAAATTTCCCAACCGTGTCTTCAAGCAGAGAACCGTCAACCGCC 4620
 QY 4727 ACCTGTGCGGCGAGTATATGATGCTCCCTCAATTAACCGGTGAGCAAC 4777
 Db 4621 ACCTGTGCGGCGAGTATATGATGCTCCCTCAATTAACCGGTGAGCAAC 4671

RESULT 3
 ABZ59570
 ID ABZ59570 standard; DNA; 4678 BP.
 XX
 AC ABZ59570;

[illegible]

Db	121	GC	CGCAGCCTTCTTCTTCTG86CGCTTTTCTCGACCTTACCTGCGTTTCTTGTGAG	180
Qy	288	CTA	AGTAAACAGGATATTTATATCTAACTTTAATTTACTTAACATGAGCTATTTGGGGTGT	347
Db	181	CTA	ACTAAACAGGATATTTATCTAATTGTATTAACATTAACATGAGCTATTTAAGGGGT	240
Qy	348	CTT	GCACTTTCCTCTAACATTCCTGAGCTGTGCTAAAGATACATGCGGTGCTCTAGCT	407
Db	241	GCTT	CAAGTTCCTCTAATGTTCTGAGCTGTGCTAAAGATACATGCGGTGCTCTTACT	300
Qy	408	AGA	CTTAGACTTCTGACTGGGAAACAATAACCATTTCTAAACAGATTAAATGCAATATA	467
Db	301	GGAT	TGACACTTCTGACTGGGAAACAATACTCAATCTAACAGACTAAATGCAATATA	360
Qy	468	TTT	AAGAGTGTGCTTCTAACTGTAATTTTACTGTGGGGGCGCTAGACGGTTCCTATA	527
Db	361	CTT	AGAGTGTGGCTTCTAAGCTTGACTTTACTGGGGGGCCACTAGACGGGTCTTGTA	420
Qy	528	CTT	TTTTTCAGGTGGAATGTAAACAATTTGAGGAAGCTATCATATCATAGATTAATGG	587
Db	421	CTT	TTTTTCAGGTGGAATGTAAACAATTTGAGGAAGCTATCATATCATAGTGTAAATGG	480
Qy	588	TGG	CCAGAGCTAAATGCTAGAAACTTAACCTGATGTGCTAGGAAGTATTAATTAATGT	647
Db	481	GGGG	CCAGGGTAAACCCCAAAAACCTCACAAGTGTGTAGAGGGGTATTAATTAATGT	540
Qy	648	TC	TTTACCATCTTGTAATCTGAAAGTGTAAACTTAAATTTTGTGCAGGAGTACTCAAA	707
Db	541	ACT	TTTACCATCTTGTAATCTGAAAGTGTAAACTTAAATTTTGTGCAGGAGTACTCAAA	600
Qy	708	AGG	AAAAATATTTTAGAGATGGAAGACGTTTATAGAAAATTTACTTAATGAAAAAATTC	767
Db	601	AGC	AAATATCTTAAAGATGGAAGACGTTTATAGAAAATTTACTTAATGAAAAAATATCC	660
Qy	768	TTT	AAAAATGTTGGTGGTGTGTAAACAATATTTGAACGGGTATATAGACAACCTGTAATTC	827
Db	661	TTT	AAAAATGTTGTATGTTGTGTGTGTAAATTTGATGACATATAGATACCTGTATTTCTGC	720
Qy	828	CTC	TTTTTGGCGAGAGACTTGTCAATGTAAAGAAGCCCGCATTAATCTGCAAAATACAGACAG	887
Db	721	TAC	TTTTTGAAGAGGAGCTTGCCATGCAAGAAACCCCGATCAACAAGCATTAATATGA	780
Qy	888	TG	CTAATGAATCTGGGAGTCTAGCTGTGAGGGGAGAGTGTGTCCATTGCTGG	947
Db	781	TAC	TAGATCTAGATGCTGGGAGTCTAGCGGACACAGGGGACAGAGGTGTGTGCATTTAATG	840
Qy	948	AA	AGGGAAACAAGCGGGTTAAAGTTTCAACACATGATAATTTGGCTATGTGAAAAACAG	1007
Db	841	GAA	GGGAACTAAGGCTAGCAATTAAGTTTCAACATATGATAATCTGTTGTGTAAAAACAG	900
Qy	1008	AGT	ATTTACTAGAGATTAATGAAAAATAGTGAATTTTAAACCAATATCTTTATTAAGTAG	1067
Db	901	AG	CTTTACAGAGATATAGTGAATCTAGTTGACTTTAACAGATACCTTTACTTAACGAG	960
Qy	1068	CAG	TCAAGTGGAGCTTTCAAATTCAAAGTGCCTTAAAGTTAGCTAATTTAATAAGCTAC	1127
Db	961	TAG	TCACAGTGGAAAGTTTCAAAATTCAAAGTGCCTAATACTAGCAATTTAATAAGCAAC	1020
Qy	1128	TAA	CTTAGTACCACTAATCTCTGTGTACATTCGATCACTTGAGAGAGGTTACTTGAT	1187
Db	1021	TAA	TTTATAGTCTCTAATGCACTATTTTATGCAATACAGACTTTGAGAGAGTTAATGTAT	1080
Qy	1188	TAA	AGAAAAATTAATAGTAAATTTATATTTGTGCAAAACTATAGATCTCTTTATAGTGG	1247
Db	1081	TAA	AAAAAAATTAATTTGTAAATTTGTACTTTGTCAAAAATAGACCCCTATATAGTGG	1140
Qy	1248	TCA	ACATGTGTAAAGTGTGATGACAAAAATGTGTAAAAAAAACACCTGTGTTTTA	1307
Db	1141	GCA	GCATGTGTAAAGTGTGATGATAAAAATGTGTGCAAAAAACACACATGTGTTTTA	1200
Qy	1308	CGG	GCACCAAGTACAGGAAAAACAATTTGGCAATGGCTAATGTCTAAATCTGTAACAGT	1367
Db	1201	TGG	CGCCCAAGTACAGGAAAAACAATTTGGCAATGGCAATGTCTAATAAGTGTTCAGT	1260

[illegible]


```

Db      3421  |CCCCAGAACTTCGAATTTGGGTAATCTTCCCTCAATACGCTTACTTAACAGTAGAG 3480
Qy      3588  |AAGTAAACACAGAGAAATTTTCAGAGACAGCAAAAATTTGGCTAGTGAAGAAATCAGCTT 3647
Db      3481  |ATGTAAACACAGAGAAATTTTCAGAGACAGCAAAAATTTGGCTAGTGAAGAAATCAGCTT 3540
Qy      3648  |TTTATGTTAGAGACAGCTTCAATTTGAACTTTGGGTACAGGGGGATCTGCCATATGT 3707
Db      3541  |TTTATGTTAGAGACAGCTTCAATTTGAACTTTGGGTACAGGGGGATCTGCCATATGT 3600
Qy      3708  |CTTAAATTTTCCAGCTGTGCCCCAGAAAACTTGAAGGCTGACCAATTTTATG 3767
Db      3601  |CTTAAATGTTTCTCCAGTGGCCCCAGAAAAATTTAGAGGGCTGACGCAACTTTATG 3660
Qy      3768  |AATATGTAACCTCTTTGTAGGTTCTGTTTAAAGGGTACTGACACATTTAGAGGGAC 3827
Db      3661  |AATATGTAACACCTCTTATAGGATCCGCTTAAAGGGTCTTGAACATTTAGAGGTACC 3720
Qy      3828  |CTAATTTTATGATGATGACACAGAGACCAAGCAATTTAGGCCCAAAAATTTATGCTG 3887
Db      3721  |CAAAATTTAATCTTTTACACATGAGAACATGCAATTCAGCCCAAACTTCAATGCTAG 3780
Qy      3888  |GGCCACTAATTAATTTCAAGTCTTACCAAGAGAGAGCAAAATTTAATACAGTGTGAA 3947
Db      3781  |GGCCACTAGTAATCTGATGCTTACCAAGAGAGAGCAAGCTCTAGTACTGAGCTGAA 3840
Qy      3948  |AAGCCCTTACAGGGCTTATGATCTGGAATAGCCAAAACACAGAAATTTCCCTAGCCCG 4007
Db      3841  |AAGCCCTTACAGGGCTTATGATCTGGAATAGCCAAAACATGAAATTTCTTACGCCCTG 3900
Qy      4008  |GGCCAGATCTCCAGCCATACATCACTGGAACCTGTAATATTTGTACAGAAATTAATG 4067
Db      3901  |GGCCAGATCTCCAGCCATACATCACTGGAACCAAGTAATATTTGTACAGAAATTAATG 3960
Qy      4068  |CCATTTCACTGACCAAAACCACTTATGAAATGCTGAGACAAGATATCAGCAAGGG 4127
Db      3961  |CCATTTCTCATGTCAGACCACTTATGTAACGCTGAAGCAAGATATCAGCAAGAG 4020
Qy      4128  |TAGGAAGATTTCAATGAAGAAAGACAGCTTAAAGCAAGTCTTAAACATGACA 4187
Db      4021  |TGGGTAGATTTCAAAATGAAGAAAGACAGCTTAAAGCAAGTCTTAAACATGACA 4080
Qy      4188  |CATACTTCCCTAATTAAGGAACCAATACACAGCAAAATTTGAAGCCCTTATAG 4247
Db      4081  |CTTACTTTCCAAATTAAGGAACCAATACACAGCAAAATTTGAAGCCCTTATAG 4140
Qy      4248  |TGGGCTCTGTTTGAAGACAGAGCTTCACTATGAAAGTCAAGCTGTGAGTAAATCC 4307
Db      4141  |TGGGCTCTGTTTGAAGACAGAGCTTCACTATGAAAGTCAAGCTGTGAGTAAATCC 4200
Qy      4308  |CTAATTAATGACAGTTTAAATCTCAATTTTGAAGCTTAAAGCGGTTGGATC 4367
Db      4201  |CAATTTAGATGACAGTTTAAATCTCAATTTTGAAGCTTAAAGCGGTTGGATC 4260
Qy      4368  |AACCACCCCTCAATTTTAAATTAATCAACCAAAAGTGGGCCAATTTGAGTATTA 4427
Db      4261  |AGCCACCTCTCAATTTTAAATTAATCAACCAAAAGTGGGCCAATTTGAGTATTA 4320
Qy      4428  |AATTCATGGGAATTAATTAATTTAGTTCAATATGCTGGGAATTAATGACAGTTTAC 4487
Db      4321  |AATTCATGGGAATTAATTAATTTAGTTCAATATGCTGGGAATTAATGACAGTTTAC 4380
Qy      4488  |CTTTAATTTGGAAGCTGGAAGGCTTCTGGAAGGTAATCCCAAGCTGGCGTTATC 4547
Db      4381  |CAATTTAATTTGGAAGCTGGAAGGCTTCTGGAAGGTAATCCCAAGCTGGCGTTATC 4440
Qy      4548  |CTTCTCATGAGAGCTGCTATTTTACATATGATGATGACCCCAAGCTATCAGATCA 4607
Db      4441  |CCCCGACGAGAGAGCTATTTTCAATATGATGATGACCCCAAGCTATCAGATCA 4500
Qy      4608  |AGCAACACACAGACAGATATGAAGCTGAAGATTTGGAAGCTGAAGAGCGTG 4667

```

```

Db      4501  |AACAACACACAGACATGATATGAAAAAGCTGAGAAATTTGTGACAGCAAAAGCCGTG 4560
Qy      4668  |TGACACCATTTGTAACATTTTCCCAAGCTGTCTCAGCAGAGAACCCGACCCGCCA 4727
Db      4561  |TGACACCATTTGTAACATTTTCCCAAGCTGTCTCAGCAGAGAGTGTAACTAAACGCCA 4620
Qy      4728  |CTGTGCGCGCCAGATTAATATGTCCTCCCAATACCCCGTGGCAACC 4777
Db      4621  |CAGATACACACACATGATCTGCTCCCTCTTACTAATTAAGACAGCC 4670

RESULT 4
ABZ59571
ID  ABZ59571 standard; DNA; 4678 BP.
XX
AC  ABZ59571;
XX
DT  27-OCT-2003 (revised)
DT  22-APR-2003 (first entry)
XX
DE  Human parvovirus B19 clone #2-B6 DNA SEQ ID NO:23.
XX
XX  Human parvovirus B19; parvovirus B19; infection; virus; blood; plasma;
KM  gene; ds.
XX
OS  B19 virus.
XX
PN  WO2003002753-A2.
XX
PD  09-JAN-2003.
XX
PF  28-JUN-2002; 2002MO-US020684.
XX
PR  28-JUN-2001; 2001US-0302077P.
PR  19-MAR-2002; 2002US-0365956P.
PR  29-MAR-2002; 2002US-0369224P.
XX
PA  (CHIR) CHIRON CORP.
XX
PI  Pichnantes S, Shyamala V;
XX
DR  WPI; 2003-201510/19.
XX
PT  Detecting a human parvovirus B19 infection in a biological sample to
PT  prevent viral transmission, comprises reacting a parvovirus B19 nucleic
PT  acid with a primer complementary to the 3'-terminal portion of the RNA
PT  target sequence.
XX
PS  Claim 70; Fig 4A-C; 148pp; English.
XX
XX  The present invention describes a method for detecting a human parvovirus
CC  B19 infection in a biological sample. The method comprises reacting the
CC  isolated parvovirus B19 nucleic acid with a first oligonucleotide
CC  consisting of a first primer containing a complexing sequence
CC  sufficiently complementary to the 3'-terminal portion of the RNA target
CC  sequence to complex with. Also described: (1) amplifying a target
CC  parvovirus B19 nucleotide sequence; (2) a polynucleotide comprising one
CC  of 47 700 base pair sequences (see ABZ59549 to ABZ59563, and ABZ59604 to
CC  ABZ59629); (3) a polynucleotide comprising either of 2 4678 base pair
CC  sequences (see ABZ59570 and ABZ59571); (4) an oligonucleotide primer
CC  consisting of a promoter region recognised by a DNA-dependent RNA
CC  polymerase operably linked to a human parvovirus B19-specific complexing
CC  sequence of 10-75 nucleotides; (5) an oligonucleotide probe comprising a
CC  parvovirus B19-specific hybridising sequence of 10-50 nucleotides linked
CC  to an acridinium ester label; and (6) a diagnostic test kit comprising an
CC  oligonucleotide primer of (4), and instructions for conducting the
CC  diagnostic test. The method is useful for detecting parvovirus infection
CC  in a biological sample, such as in blood products, to prevent
CC  transmission of the virus through blood and plasma derivatives or by
CC  close personal contact. ABZ59549 to ABZ59634 and ABZ5762 to ABZ57267
CC  represent sequences used in the exemplification of the present invention.
CC  (Updated on 27-Oct-2003 to standardise OS field)

```

Query Match	72.1%;	Score 3626;	DB 8;	Length 4678;
Best Local Similarity	86.2%;	Pred. No. 0;		
Matches 4026;	Conservative	0;	Mismatch	50

117 CCCGCCCTTAATGAAATTAAGCCGCCAATGTTTAATGTTAATTTAATTTAATTTAATTTGACAAC 176
1 CCGGCTTAATGCAAAATGAGCAGCCATCTTAAGTGTTTAATTAATTTAATTTAATTTATGTCATGT 60
177 GCTTAAACGGTTAAATATGAGCGGAGCTAAGGCGGGTATATATAGAGAGCTGGG-----T 227
61 TTGTAAACGGTTAAATATGAGCGGAGCTAAGGCGGGTATATATAGAGAGCTGGG 120
228 TCCCTGACACTTTCTTTCTGAGTCTTTGATCTGAACTCACTTCTGTTCTTTGCTG 287
121 GCCGAGAGCTCTTTCTTTCTGAGTCTTTTCTGGAATCACTTCTGTTCTTTTGTGAG 180
288 CTAACTTAACAGATATATTAATCACTTTAATTTAATCAATGAGGCTAATTTGGGGTCT 347
181 CTAACTTAACAGATATATTAATCACTTTAATCAATGAGGCTAATTTAATGAGGGGT 240
348 CTTCACATTTCCCTTAACTTCTGGAATGAGCTAATGATACTGAGTGGCTTAACT 407
241 GCTTCAAGTTCTTTCTTAATGTTTGTGAGCTGTCTAAGCAATTAACGTGGTGGCTTTAACT 300
408 AGAATTGAATATCTTCTGACTGGGAAACCACTAACCCATTTCAACAGATTAATGGCAATTA 467
301 GGATTTAAGACACTTCTGACTGGGAAACCACTAACTCACTAAGCACTAATGGCAATTA 360
468 TTTAAGCAAGTGTCTTCTTAACTTGAATTTAATCTGGGGGGCGGTACAGAGTTCCTTAA 527
361 CTTAAGCAAGTGTCTTCTTAACTTGAATTTAATCTGGGGGGCGGTACAGAGGAGTCTTAA 420
528 CTTTCTTCAAGTGGAAATGTAACAATTTGAGAAAGCTATCATATCATATGATTAATGG 587
421 CTTTCTTCAAGTGGAAATGTAACAATTTGAGAAAGCTATCATATCATATGATTAATGG 480
588 TGGTCCAGACCTAAATGCTAAGAACTTAATCTGTGCTGAGAGGTTAATTAATAGT 647
481 GGGGCGCAGGTTTAAACCCAGAAACCTCAAGTGTGTAGAGGGTTAATTAATAGT 540
648 TCTTTACATCTTGTAACTGAAGGTAACTTAATTTTGGCAGGAGTACATCCAA 707
541 ACTTATATCACTTGTAACTGAAGGTAACTTAATTTTGGCAGGAGTACATCCAA 707
708 AAGAAATATTTTAAAGATGAGAGCAGTTTATAGAAATTTCTTAATGAAATTAATCC 767
601 AAGCAAAATCTTAAAGATGAGAGCAGTTTATAGAAATTTCTTAATGAAATTAATCC 660
768 TTTAATGTTGTGTGTGTTAACTTAATTTGACGGGTAAATGACACTGTTATTTCCG 827
661 TTTAATGTTGTGTGTGTTAACTTAATTTGACGGGTAAATGACACTGTTATTTCCG 720
828 CTTTCTTCCGAGAGCACTTGTATGCTTAAAGACCCCGCATTAATCTGCAATTAACAGAG 887
721 TACTTTTGAAGAGAGCACTTGTATGCTTAAAGACCCCGCATTAATCTGCAATTAACAG 780
888 TGTCTAATTAATGAATCTGGGAGTCTAGCTGTGAGAGGGGAGATGTGTGCAATTCGTTG 947
781 TACTAATTAATGAATCTGGGAGTCTAGCTGTGAGAGGGGAGATGTGTGCAATTCGTTG 840
948 AAGAGGAACAAAGACGGGGTTAAAGTTTCAACATGTTAAATTTGGCTATGTGAAACAG 1007
841 GAAGGGAACAAAGACGGGGTTAAAGTTTCAACATGTTAAATTTGGCTATGTGAAACAG 900
1008 AGTATTTAATGAAGATTAATGAAATTTAGTGAATTTAATCAATATATCTTATTAATAGT 1067
901 AGTATTTAATGAAGATTAATGAAATTTAGTGAATTTAATCAATATATCTTATTAATAGT 960
1068 CAGTCAAGTGCAGCTTTCAAATTCAGAGGCTTAAATTTAGTCAATTTAATTAAGCTAC 1127
961 TAGTCAAGTGCAGCTTTCAAATTCAGAGGCTTAAATTTAGTCAATTTAATTAAGCTAC 1020

QY	1128	TAACTAGTACCCACTAGTACATCTTGTTACATTCAGACTTTGAGAGGTTACTTGCAAT	1187
DB	1021	TAAATTAGTGCTTACTAGACATCTTTATATGCAATACAGACTTTGAGCAAGTTATGTGTAT	1080
QY	1188	TAAAGAAATTAATTAAGTAAATTAATTAATTTATTTGTGTCAAAACATAGATCTCTTTATAGTGG	1247
DB	1081	TAAAGACAATAAATTTGTAAATTTGTATCTTTGTCAAAACTATATACCCCTTATTAAGTGG	1140
QY	1248	TCAACATGTGTAAAGGTAGTATGACAAAATATGTGTAAATAAACAACCTGTGTATTTA	1307
DB	1141	GCAGCAGTGTTTAAAGTGAATTAATAAATAATGTGCAGAAAACACACTGTGGTTTTA	1200
QY	1308	CGGGCCACCAAGTACTGGAATAAACAATTTGGCAATGSCATATTGTCTAAATCTGTACAGT	1367
DB	1201	TGAGACCGCCAAAGTACAGGGAAAAACAATTGGCAATGSCATTTGTCAAAGATGTTCCAGT	1260
QY	1368	GTAATGAAATGGTGAATTTGGAATTAATGAAAATCTTTCATTTAAATGATATGAGCGGAGAAAAG	1427
DB	1261	ATATGGCAATGTTTAATCTGGAATTAAGAAAATCTTCCATTTAATGATATGAGCAAGAAAAG	1320
QY	1428	TTTGTGTGTCTGGAGTGAAGGCAATTTAATGATCCATTTGTGGAAGCTGCAAAAGCCAT	1487
DB	1321	CTTGTGTGTCTGGAGTGAAGGATTTATTAATGATCTCAATTTGTAAGAGCTGCAAAAGCCAT	1380
QY	1488	TTTAAAGGTGTGAGCCAAACCAAGGTATGATCAGAAAATGCGTGGCAGTGTGGCAGTGCCTGG	1547
DB	1381	TTTAAAGCGGCAACCAACCAAGGTATGATCAGAAAATGCGTGGAGTGTAGTGTGCTGG	1440
QY	1548	TGTGCTGTGTGTATTAACAGCAATGTGTGATTAATCTTTGTATGAGTGTATTAACAC	1607
DB	1441	AGTATCCCGTGTATTAACAGCAATGTGTGATTAATCTTTGTATGAGCGGAAACACTAC	1500
QY	1608	TACAACTGTGATGCTAAAGCCTTAAGGAACGATGTGAATAGCTTAACTTATCATATAG	1667
DB	1501	AACAATGTATATCTTAAAGCCTTAAAGAGCGCATGTAAAGTTAACTTATCTGTATAG	1560
QY	1668	ATGTAGCCCTGACATGTGTTTACTTAAGAGGCTGATGATCAACAATAGCTTAATCTGTGTG	1727
DB	1561	ATGTAGCCCTGACATGTGTTTACTTAAGAGGCTGATGATCAACAAGCTTATCATATGTGTG	1620
QY	1728	TAAATGCAAAAGCTGAGGCCATATGAAAATCTGGGCAATTAATCATCAATTTGATTTCCC	1787
DB	1621	TAAATGCAAAAGCTGAGGCCATATGAAAATCTGGGCAATTAATCATCAATTTGATTTCCC	1680
QY	1788	TGGAATTAATGACAGATGCTCTCCACCCAGATCTCCAAACCAACCCCATTTGTCCAGACAC	1847
DB	1681	TGGAATTAATGACAGATGCTCTCTCCACCCAGATCTCCAAACCAACCCCATTTGTCCAGACAC	1740
QY	1848	CAGTATCAGAGAGTGTGTGTGAAGAGCTGTGAAGACTCAGTGAAGAGAGCTTTTTCAA	1907
DB	1741	CAGTATCAGAGAGTGTGTGTGAAGAGCTGTGAAGACTCAGTGAAGAGAGCTTTTTCAA	1800
QY	1908	CCTGATCACTCCAGCGCTTGAAACAGTGAACCCCGGCTTATGATGACCCCGTCCCGG	1967
DB	1801	CCTGATCACTCCAGCGCTTGAAACAGTGAACCCCGGCTTATGATGACCCCGTCCCGG	1860
QY	1968	GACCACTTCAAGAGATCATTTGTGTGAAGCCAGATTTCTCCGAAGTGTAGCCGCTC	2027
DB	1861	GACCACTTCAAGAGATCATTTGTGTGAAGCCAGATTTCTCCGAAGTGTAGCCGCTC	1920
QY	2028	GTGGAGAGAGCTTTTACAGCGCGCTTGCCAGATCAAGTTTGTGAATCTTTATGAGGGGT	2087
DB	1921	GTGGAGAGAGCTTTTACAGCGCGCTTGCCAGATCAAGTTTGTGAATCTTTATGAGGGGT	1980
QY	2088	TGACTTTTATAGGATGTGTGAAGGGATTTGCTGTGTGTGTGAACATATTAACAA	2147
DB	1981	TGACTTTTATAGGATGTGTGAAGGGATTTGCTGTGTGTGTGAACATATTAACAA	2040
QY	2148	CAGTGGGAGAGGTTTGGGGCTTTGCGCTCAATGATTAATATGTGGAGCTTGTATATAGG	2207
DB	2041	TAGTGGGAGAGGCTTGGGACTTTTGTCCCAATGATTAATATGAGGGCTTGTGTATATAGG	2100

2208 ATGGAATTTAGAGATTACTCCAGACTTATGCGCTGCGAGTGTGATGAGAGCCTC 2267
2101 ATGGAATTTGAGAAATTTTACCCAGATTGCTGCGATGTAGTCCATGTGGAGCTTC 2160
2268 TAAACCATTTTCTGTGTAACTGTGAAAAATGCTTACCTGTCTGATTTACAAAGTTT 2327
2161 TAAATCCCTTTCTGTGTAACTGTGAAAAATGCTTACCTGTCTGATTTACAAAGTTT 2220
2328 TGTAGATTAAGAGAAACCACTAACAAATGCTGGAAAGCAGAGCAAAATTTGCCAAG 2387
2221 TGTAGATTAAGAGAAAG 2280
2388 ACCTGTATAGCAGTTTGTGCAATTTTATGAAAAAGCTACTGGAACAGACTTAAAGCTTA 2447
2281 CTGTGTATGAGCAATTTGTGAAATTTTATGAAAAAGTTTACTGGAACAGACTTAAAGCTTA 2340
2448 TTCAAAATTTTAAAGACATTACAAATTTCTTATGATTAATCTTTAGAAAAACCTCTCT 2507
2341 TTCAAAATTTTAAAGACATTACAAATTTCTTATGATTAATCTTTAGAAAAACCTCTCT 2400
2508 CTTTATTTTGTAGTGTGCTGCTGCACTTAAAGTATCTTAAAGAACTCTCCAGACTTATTA 2567
2401 CTTTGTGTGCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2460
2568 GTCAATCATTTTCAAGGCGCATGAGCAGTATCTGACCAACCCCGCTTATCATCCAGTA 2627
2461 GTCAATCATTTTCAAGGCGCATGAGCAGTATCTGACCAACCCCGCTTATCATCCAGTA 2550
2628 ACAGTATGAGCAACCTTAAAGAGAAATGAGAGTATCTTATGAGAACTTACACAAAGC 2687
2521 GCAGTCATGAGCAACCTTAAAGAGAAATGAGAGTATCTTATGAGAACTTACACAAAGC 2580
2688 CTGGGCAAGTTAGATCAATTAACCCGCTTAACTATGTTGGGCTCTGGCAATGAGCTAC 2747
2581 CTGGGCAAGTTAGATCAATTAACCCGCTTAACTATGTTGGGCTCTGGCAATGAGCTAC 2640
2748 AAGCTGGGCTCTGGCAATGAGTGTGAGCAGTGTGAGAGAGATTCATGACTTATGAGTATA 2807
2641 AAGCTGGGCTCTGGCAATGAGTGTGAGCAGTGTGAGAGAGATTCATGACTTATGAGTATA 2700
2808 GCCAATTTGCTAAGTTGGGAAATTAATCTTATACAACTTGGACGGTAGCAGATGAGAAAT 2867
2701 GCCAATTTGCTAAGTTGGGAAATTAATCTTATACAACTTGGACGGTAGCAGATGAGAAAGC 2760
2868 TGTATTAATAATTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 2927
2761 TTTTAAAAAATTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 2820
2928 CTTTAAAAAGGAGCTGCGCTGCTGGGCTTTCAGAGAAAGTTTACCGGAAGTGCCTCG 2987
2821 CTTTAAAAAGGAGCTGCGCTGCTGGGCTTTCAGAGAAAGTTTACCGGAAGTGCCTCG 2880
2988 CGTACAAAGCTCTGAGAAAAATACCCAGCAGTACTTCAAGTTAACTCTGCAAGAACGCA 3047
2881 CTTACAAAGCTCTGAGAAAAATACCCAGCAGTACTTCAAGTTAACTCTGCAAGAACGCA 2940
3048 CTGTGTAGAGGCGGGGAGGAGTACCACTTACAAAAAGAGTGTGAGAGAGGCTTCAAT 3107
2941 CTGTGTAGAGAGGCGGGGAGGAGTACCTGTGAAAAAGCAGTGTGAGAGAGGCGCTCACTT 3000
3108 TTAATGCTTAATCTGTACGCTGATCATTTCTCTAGCAATTTTAAATTCATATGATCAG 3167
3001 TTAATGCTTAATCTGTACGCTGATCATTTCTCTAGCAATTTTAAATTCATATGATCAG 3060
3168 AGCATCATTAATAAGTGTCTCTCAGCAGCTAGTACCTGCAAAATGCTAGTGGAAAG 3227
3061 AGCATCATTAATAAGTGTGTCTCTCAGCAGCTAGTACCTGCAAAATGCTAGTGGAAAG 3120
3228 AGGCAAAAGTGTGACTATTAATGCTTATGAGGAGTCTTACTCTGCTGAGAGATCTTAG 3287
3121 AGGCAAAAGTGTGTGACCAATTAATGCTTATGAGGAGTCTTACTCTGAGAGATCTTAG 3180
3288 ATTTAATGCTTAAATTTGTTTCTCAACATTAAGATTGAGCACTTAATGAAATTT 3347

3181 ATTTAATGCTTAAATTTATTTTCTACCTTATGAGTTTACAGCTTATTAATGAAATTT 3240
3348 ATGTATGATAGTCTCCAGATGCTTAACTGTAATCTTATTAAGAAATTTGCTTAAAGATG 3407
3241 ATGGAATTAAGTCTCTGATGCTTAACTGTAATCTTATTAAGAAATTTGCTTAAAGATG 3300
3408 TCAAGCAAAAGAGGAGGAGTGTGCAAGTTACTGACAGACCAAGAGAGTTTGTGTA 3467
3301 TTAACAAACAAATCTGAGAGGAGGAGTGTGCAAGTTACTGACAGACCAAGAGAGTTTGTGTA 3360
3468 TGTATGATCATGATTAATAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 3527
3361 TGTATGATCATGATTAATAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 3420
3528 CTCCAGAACTGCCAATTTGGGTTTACTTTTCCCCCGAGTGTCTTAACTTAACTGATG 3587
3421 CCCAGAACTGCCAATTTGGGTTTACTTTTCCCCCGAGTGTCTTAACTTAACTGATG 3480
3588 AAGTAAACACAAAGGAATTTGAGAGAGAGCAAAATTTGGCTAGTGAAGATCAGCTT 3647
3481 ATGTAAACACAAAGGAATTTGAGAGAGAGCAAAATTTGGCTAGTGAAGATCAGCTT 3540
3648 TTTATGTTTGAAGACAGATTCATTTTGAATTTTGGGTAAGAGGAGATCTGCAATATGT 3707
3541 TTTATGTTTGAAGACAGATTCATTTTGAATTTTGGGTAAGAGGAGATCTGCAATATGT 3600
3708 CTTACAAATTTCCAGCTGTGCCCCCAGAAAACTTAAAGGCTGACCAACTTTTATG 3767
3601 CTTATTAAGTTTCTCCAGAGTCCCCCAGAAAAATTTAAGGAGGCTGACCAACTTTTATG 3660
3768 AAATGTACAACTTTGTAAGTGTCTGTTTAAAGGAGTGTGACCACTTAAAGGAGGAGC 3827
3661 AAATGTACAACTTTGTAAGTGTGTGTTTAAAGGAGTGTGACCACTTAAAGGAGGAGC 3720
3828 CTTAATTTAGATCAATTTGACACAGAAAGACCAAGCAATTTCAAGCAAACTTTATGCTG 3887
3721 CAAATTTAGATCTTTTAAACAGATGAAGACCAATTTCAAGCAAACTTTATGCTG 3780
3888 GGCACATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 3947
3781 GGCACATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 3840
3948 AAGCCCTTAAGGAGGCTTATGATGAGGAGTGTGACCAAAACACAGAAATTTCCCTACG 4007
3841 AAGCCCTTAAGGAGGCTTATGATGAGGAGTGTGACCAAAACACAGAAATTTCCCTACG 3900
4008 GGCACATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 4067
3901 GGCACATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 3960
4068 CCAATTTCAATGAGCAAAACCACTTATGAAATGCTGAGCAAAAGATTAACAGAGGG 4127
3961 CCAATTTCAATGAGCAAAACCACTTATGAAATGCTGAGCAAAAGATTAACAGAGGG 4020
4128 TAGGAATTTTCAAAATGAAGAAAGAGTGTGAGCAAGTTAAAGGCTTAAATGAGCA 4187
4021 TGGGTGATTTTCAAAATGAAGAAAGAGTGTGAGCAAGTTAAAGGCTTAAATGAGCA 4080
4188 CATATCTTCCCTAATTAAGAAAGCAACCAATATACAGCAAAATTTGAAGGCTTATG 4247
4081 CTATCTTCCCTAATTAAGAAAGCAACCAATATATCAATTAATTTGAAGGCTTATG 4140
4141 TGGGTCTGTATGAAACAGAAAGAGCTTCACTATGAAAGCAGCTGTGAGTAAATTT 4200
4308 CTAATTTAGATGACAGTTTAAATCAATTTTGAAGGCTTAAAGGCTTAAATTTGATC 4367
4201 CAAATTTAGATGACAGTTTAAATCAATTTTGAAGGCTTAAAGGCTTAAATTTGATC 4260
4368 AACCACTTCCCTAATTAATTTTAAATTAATTAATTAATTAATTAATTAATTAATTAAT 4427

```

Db      4261 AGCCACTCTCTCAATATTTTAAAAATATTACCAAGAGGCGCAATTGAGATTTA 4320
Qy      4428 AATCCATGGGAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4487
Db      4321 AATCAATGGGAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4380
Qy      4488 CCTTAAATTTGGGAGCTTCGAAAGGCTTAATGAAAGTGAATCCCAAGCTGGGCTTATC 4547
Db      4381 CATTAAATTTGGGAGCTTCGAAAGGCTTAATGAAAGTGAATCCCAAGCTGGGCTTATC 4440
Qy      4548 CTCCTCATGAGCTGGCTATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4607
Db      4441 CCCCAGACGACGAGGCTATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4500
Qy      4608 AGCAACACACACACACACATGATTAATTAATTAATTAATTAATTAATTAATTAATTA 4667
Db      4501 AACCAACACACACACACATGATTAATTAATTAATTAATTAATTAATTAATTAATTA 4560
Qy      4668 TGACCCATTTGTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4727
Db      4561 TGACCCATTTGTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4620
Qy      4728 CCTGTGCGCGCCGAGATTATATGTCCTCCCAATACCCCTGAGGCAAC 4777
Db      4621 CCAGTACACACACACACATGATTAATTAATTAATTAATTAATTAATTAATTAATTA 4670

```

RESULT 5

AAK81583
ID AAK81583 standard; DNA; 2343 BP.

AC AAK81583;

DT 26-AUG-1999 (first entry)

DE Erythrovirus V9 DNA sequence encoding VP1 protein.

KM Erythrovirus V9; differential diagnosis; parvovirus; infection;

OS Erythrovirus screening; typing; immunosay; VP1 protein; ss.

FR2771751-A1.

04-JUN-1999.

03-DEC-1997; 97FR-00015197.

03-DEC-1997; 97FR-00015197.

(ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.

Nguyen QT, Garbarg CA, Auguste V,

WPI: 1999-349543/30.

P-PSDB; AAY23227.

Erythrovirus V9 and its nucleic acid sequences - can be used in the

diagnosis of its infections.

Claim 3; Page 48-50; 80pp; French.

The present sequence is derived from nucleotides 2336-4678 of AAK81580,

and encodes an erythrovirus V9 protein. Probes and primers derived from

erythrovirus V9 polynucleotide sequences (AAK81580) can be used for

differential diagnosis of erythrovirus (parvovirus) infections by a

combination of amplification and hybridization assay. The probes can also

be used to assess susceptibility to erythrovirus infection and for

immunosays for diagnosis of erythrovirus V9 infections

Sequence 2343 BP; 752 A; 498 C; 489 G; 604 T; 0 U; 0 Other;

```

Query Match      46.6%; Score 2343; DB 2; Length 2343;
Best Local Similarity 100.0%; Pred. No.:0;
Matches 2343; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2336 ATGAGTAAACCACTTAACAAATGTTGGAAAGAGTGCACAAATTTGCCAGAGCTGTAT 2395
Db      1 ATGAGTAAACCACTTAACAAATGTTGGAAAGAGTGCACAAATTTGCCAGAGCTGTAT 60
Qy      2396 AAGCAGTTTGTCAATTTTATGAAAAAGCTACGAGAACAGACTTAAGCTTATTCAAAT 2455
Db      61 AAGCAGTTTGTCAATTTTATGAAAAAGCTACGAGAACAGACTTAAGCTTATTCAAAT 120
Qy      2456 TTTAAAGACATTAACAAATTTCTTAGATTAATCCTTTAGAAAAACCCCTCTTATTT 2515
Db      121 TTTAAAGACATTAACAAATTTCTTAGATTAATCCTTTAGAAAAACCCCTCTTATTT 180
Qy      2516 GACTTAGTCTGCACTTAAAGTATCTTTAAAACTCTCCAGACCTATATAGTCATCAT 2575
Db      181 GACTTAGTCTGCACTTAAAGTATCTTTAAAACTCTCCAGACCTATATAGTCATCAT 240
Qy      2576 TTTCAAGCCATGACATTAATCTGACACCCCATGCTTATCATTCAGTAACGTAGT 2635
Db      241 TTTCAAGCCATGACATTAATCTGACACCCCATGCTTATCATTCAGTAACGTAGT 300
Qy      2636 GCAGAACTTAGAGAGAAAAATGAGTATTATCTAGTAAAGACTTACACAGCCTGGGCA 2695
Db      301 GCAGAACTTAGAGAGAAAAATGAGTATTATCTAGTAAAGACTTACACAGCCTGGGCA 360
Qy      2696 GTTAGCATCAATTTACCGGCTACTAATATGTTGGCCCTGGCAATGAGCTCAAGCTGG 2755
Db      361 GTTAGCATCAATTTACCGGCTACTAATATGTTGGCCCTGGCAATGAGCTCAAGCTGG 420
Qy      2756 CCTCCGACAGATGCTGTGACAGTCTGCAAGATTCATGACTTTAGGTATGACCAATTG 2815
Db      421 CCTCCGACAGATGCTGTGACAGTCTGCAAGATTCATGACTTTAGGTATGACCAATTG 480
Qy      2816 GCTAAGTTGGGAATTAATCCTTATTAATTAATGACAGTGAAGTGAAGTGAATTTGTA 2875
Db      481 GCTAAGTTGGGAATTAATCCTTATTAATTAATGACAGTGAAGTGAAGTGAATTTGTA 540
Qy      2876 AATATTAATAAATGAACAGGCTTTCAGACACAGTGAAGTGAAGTGAATTTGTA 2935
Db      541 AATATTAATAAATGAACAGGCTTTCAGACACAGTGAAGTGAAGTGAATTTGTA 600
Qy      2936 GGTGAGCTGCGCCCTGTGGCCCATTTTTCAGAGAACTTACCGGAAGTCCCGGTACAC 2995
Db      601 GGTGAGCTGCGCCCTGTGGCCCATTTTTCAGAGAACTTACCGGAAGTCCCGGTACAC 660
Qy      2996 GCTTCAGAAAAATACCCAGCATGACTTCACTTACCTGCAAGAGCAGCAGCTGTGCA 3055
Db      661 GCTTCAGAAAAATACCCAGCATGACTTCACTTACCTGCAAGAGCAGCAGCTGTGCA 720
Qy      3056 GCGGAGGAGGTAGCAACCTTAACAAAAAGCATGTGAGTGAAGGAGCTACATTTAGCTG 3115
Db      721 GCGGAGGAGGTAGCAACCTTAACAAAAAGCATGTGAGTGAAGGAGCTACATTTAGCTG 780
Qy      3116 AATTCGTAAAGTGTACATTTCTAGGCAATTTTAAATCCATATATGACAGATCAT 3175
Db      781 AATTCGTAAAGTGTACATTTCTAGGCAATTTTAAATCCATATATGACAGATCAT 840
Qy      3176 TATTAAGTGTCTCTCAGAGCTAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 3235
Db      841 TATTAAGTGTCTCTCAGAGCTAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 900
Qy      3236 GTGAGCATTTATGCTCCATTAATGAGGAGTCTGCTCCGTGAGATCTTATTTAT 3295
Db      901 GTGAGCATTTATGCTCCATTAATGAGGAGTCTGCTCCGTGAGATCTTATTTAT 960
Qy      3296 GCTTAAATTTGTTTTTTCACCATTAAGTTCAGACTTAATTAAGTGAAGTGAAGTGAAG 3355
Db      961 GCTTAAATTTGTTTTTTCACCATTAAGTTCAGACTTAATTAAGTGAAGTGAAGTGAAG 1020
Qy      3356 ATAGCTCCAGATGCTTTAATCTTAATTTTCAAGAAATTTGTTAAAGATGTCAAGAC 3415

```

```

Db 1021 ATAGCTCAAGTGTCTTAACGTAACTATTCCAGAAATGCTGTAAAAAGATGCACGAC 1080
Qy 3416 AAAACAGAGAGAGGTGTGCAAGTTACTGACAGCACACAGAGACCTTTGTGTATGTATGTG 3475
Db 1081 AAAACAGAGAGAGGTGTGCAAGTTACTGACAGCACACAGAGACCTTTGTGTATGTATGTG 1140
Qy 3476 GATCATGATTAATATACCATATGCTGTAGTGAAGGAGCAAGACACTAGCTCCGAA 3535
Db 1141 GATCATGATTAATATACCATATGCTGTAGTGAAGGAGCAAGACACTAGCTCCGAA 1200
Qy 3536 CTGCCCATTGTTGGTTTACTTTCCCCCAAGATGCTTACTTAACATGATGTAAGTAAC 3595
Db 1201 CTGCCCATTGTTGGTTTACTTTCCCCCAAGATGCTTACTTAACATGATGTAAGTAAC 1260
Qy 3596 ACACAGGAATTTTCAGAGACAGCAAAAATTGGCTAGTGAAGATCACTTTTATGTG 3655
Db 1261 ACACAGGAATTTTCAGAGACAGCAAAAATTGGCTAGTGAAGATCACTTTTATGTG 1320
Qy 3656 TTAGAGACAGTTCAATTGAACTTTGGGTACAGGGGAGTCTGCACTATGCTTACAA 3715
Db 1321 TTAGAGACAGTTCAATTGAACTTTGGGTACAGGGGAGTCTGCACTATGCTTACAA 1380
Qy 3716 TTTCAGCTGTGCCCCCAGAAAACCTTAGAAGCTGACCCAACTTTTATGAATGTAC 3775
Db 1381 TTTCAGCTGTGCCCCCAGAAAACCTTAGAAGCTGACCCAACTTTTATGAATGTAC 1440
Qy 3776 AACCTTTGTACGGTCTCGTTTAGGGGTACTGACACTTAGAGAGGGACCTTAAATTT 3835
Db 1441 AACCTTTGTACGGTCTCGTTTAGGGGTACTGACACTTAGAGAGGGACCTTAAATTT 1500
Qy 3836 AGATCATGACACAGGAAGCAAGCAATTCAGCCAACTTATGCTGGGCCCTA 3895
Db 1501 AGATCATGACACAGGAAGCAAGCAATTCAGCCAACTTATGCTGGGCCCTA 1560
Qy 3896 ATAAATTCAGTGTCTACCAAGAGAGAGACAATTCATATCAGTGTGAAAAAGCCCTT 3955
Db 1561 ATAAATTCAGTGTCTACCAAGAGAGAGACAATTCATATCAGTGTGAAAAAGCCCTT 1620
Qy 3956 ACGGGGCTTAGTACTGCGACTAGCCAAACACAGAAATTTCCCTACGCCCGGGCCAGTA 4015
Db 1621 ACGGGGCTTAGTACTGCGACTAGCCAAACACAGAAATTTCCCTACGCCCGGGCCAGTA 1680
Qy 4016 TCTCAGCATACCATCTGAGACACTGATTAATATGTTACAGAAATTAATGCTCATTTCA 4075
Db 1681 TCTCAGCATACCATCTGAGACACTGATTAATATGTTACAGAAATTAATGCTCATTTCA 1740
Qy 4076 CATGACAAACCACTTATGAAATGCTGAGGACAAAGATATGCAAGGGGTAGAAAG 4135
Db 1741 CATGACAAACCACTTATGAAATGCTGAGGACAAAGATATGCAAGGGGTAGAAAG 1800
Qy 4136 TTTCCAATGAAAAAGAACAGCTTACAGCTTACAGCTTCAATGACACACTATTC 4195
Db 1801 TTTCCAATGAAAAAGAACAGCTTACAGCTTACAGCTTCAATGACACACTATTC 1860
Qy 4196 CTTAATTAAGAAACCCCAATACAGACCAATTAAGAGCCCTCTTATGATGAGGCTCT 4255
Db 1861 CTTAATTAAGAAACCCCAATACAGACCAATTAAGAGCCCTCTTATGATGAGGCTCT 1920
Qy 4256 GTTGGAGAGAGAGCTTCTCACTATGAAAGTCAAGCTGAGTAATATCCCTAACTTA 4315
Db 1921 GTTGGAGAGAGAGCTTCTCACTATGAAAGTCAAGCTGAGTAATATCCCTAACTTA 1980
Qy 4316 GATGACAGTTTAAATCTCAATTTGACGCCCTAGCGGGGTGAGGTTTGCATCAACACC 4375
Db 1981 GATGACAGTTTAAATCTCAATTTGACGCCCTAGCGGGGTGAGGTTTGCATCAACACC 2040
Qy 4376 CTTCAATTAATTTTAAAAATTAATCAAAAGTGGCCCAATGAGGATTAATCAATG 4435
Db 2041 CTTCAATTAATTTTAAAAATTAATCAAAAGTGGCCCAATGAGGATTAATCAATG 2100
Qy 4436 GGAATTACTTACTTATGATATGCTGTGGGAATTAATGACATGACCTTTAAA 4495

```

```

Db 2101 GGAATTACTTACTTATGATATGCTGTGGGAATTAATGACATGACCTTTAAA 2160
Qy 4496 TTGGGACCTTGAAAGGCTACTGAAAGTGAATCCCAAGCTGGCTTTATCTCTCAT 4555
Db 2161 TTGGGACCTTGAAAGGCTACTGAAAGTGAATCCCAAGCTGGCTTTATCTCTCAT 2220
Qy 4556 GCACTGTGCTATTACATATGATGATGATGACCCCAAGCTGACAGATGCAAGACAC 4615
Db 2221 GCACTGTGCTATTACATATGATGATGATGACCCCAAGCTGACAGATGCAAGACAC 2280
Qy 4616 CACAGACACGATATGAAAAAGCTGAAAGATTGTGGAATGCAAAAGCCGTGTGACCCA 4675
Db 2281 CACAGACACGATATGAAAAAGCTGAAAGATTGTGGAATGCAAAAGCCGTGTGACCCA 2340
Qy 4676 TTG 4678
Db 2341 TTG 2343

```

RESULT 6

AAK81581

ID AAK81581 standard; DNA; 2013 BP.

AAK81581;

26-AUG-1999 (first entry)

Erythrovirus V9 DNA sequence encoding NS1 protein.

Erythrovirus V9; differential diagnosis; parvovirus; infection;

Erythrovirus screening; typing; immunoassay; NS1 protein; ss.

Erythrovirus.

FR2771751-A1.

04-JUN-1999.

03-DEC-1997; 97FR-00015197.

03-DEC-1997; 97FR-00015197.

(ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.

Nguyen QT, Garbary CA, Auguste V;

WPI; 1999-349543/30.

P-PSDB; AAY23225.

Erythrovirus V9 and its nucleic acid sequences - can be used in the

diagnosis of its infections.

Claim 3; Page 42-45; 80pp; French.

The present sequence is derived from nucleotides 328-2340 of AAK81580, and encodes an erythrovirus V9 protein. Probes and primers derived from erythrovirus V9 polynucleotide sequences (AAK81580) can be used for differential diagnosis of erythrovirus (parvovirus) infections by a combination of amplification and hybridisation assay. The probes can also be used to assess susceptibility to erythrovirus infection and for erythrovirus screening and typing. The antibodies can be used in immunoassays for diagnosis of erythrovirus V9 infections

Sequence 2013 BP; 591 A; 355 C; 480 G; 587 T; 0 U; 0 Other;

Query Match 40.0%; Score 2013; DB 2; Length 2013;

Best Local Similarity 100.0%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0;

328 ATGAGACTAATTTGGGGGTGCTTGGACATTTCTCTTAACATTTGACATGCTGTAAATGAT 387
 1 ATGAGACTAATTTGGGGGTGCTTGGACATTTCTCTTAACATTTGACATGCTGTAAATGAT 60

QY 388 AACGCTGCTGCTCTAGTACGCTTGAATCTTCTGCTGGAACCACTAACCCATCT 447
 DB 61 AACTGCTGCTCTCTAGTACGCTTGAATCTTCTGCTGGAACCACTAACCCATCT 120
 QY 448 AACAGTTAATGCAATATATATTAAGCAGTGTGCTCTTCAAACTGATTTTACGGGGG 507
 DB 121 AACAGTTAATGCAATATATTAAGCAGTGTGCTCTTCAAACTGATTTTACGGGGG 180
 QY 508 CCGCTAGCAGTGTGCTTACTTTTTCAGGTGGAATTAACAATTTGAGGAAGCTAT 567
 DB 181 CCGCTAGCAGTGTGCTTACTTTTTCAGGTGGAATTAACAATTTGAGGAAGCTAT 240
 QY 568 CATATCCATGATATGTTGTTGCTCAGGCACTAATGCTGAAATCTTACCTGATGCTA 627
 DB 241 CATATCCATGATATGTTGTTGCTCAGGCACTAATGCTGAAATCTTACCTGATGCTA 300
 QY 628 GAAGTTAATTAATGCTCTTACCATCTTGTAACTGAAAGTGTAACTTAAATTT 687
 DB 301 GAAGTTAATTAATGCTCTTACCATCTTGTAACTGAAAGTGTAACTTAAATTT 360
 QY 688 TTGCTCAGGATGACTACCAAGAAATATTTTGAAGATGAGAGAGATTATAGAAAT 747
 DB 361 TTGCTCAGGATGACTACCAAGAAATATTTTGAAGATGAGAGAGATTATAGAAAT 420
 QY 748 TACTTAATGAAAAAATCTCTTAAATGTTGTGTGTGAACAATAATGACGGGTAT 807
 DB 421 TACTTAATGAAAAAATCTCTTAAATGTTGTGTGTGAACAATAATGACGGGTAT 480
 QY 808 ATGACACCTGTATTTTCCGCTCTTTTCCGCGAGAGCTTGTCAATGCTAAAGACCCGCG 867
 DB 481 ATGACACCTGTATTTTCCGCTCTTTTCCGCGAGAGCTTGTCAATGCTAAAGACCCGCG 540
 QY 868 ATTACTGCAAAATCAGACAGTGTCTATGAACTGGGAGCTTACGTTGTGAGGGGGA 927
 DB 541 ATTACTGCAAAATCAGACAGTGTCTATGAACTGGGAGCTTACGTTGTGAGGGGGA 600
 QY 928 GATGTGTGCTGCTGCTGGAAGGAAACAAGCGGGTTAAAGTTTCAACCAATGTA 987
 DB 601 GATGTGTGCTGCTGCTGGAAGGAAACAAGCGGGTTAAAGTTTCAACCAATGTA 660
 QY 988 AATGCTATGTAAGAACAGAGTATTTCTGAATTAATGAAATTAAGTGAATTTTAC 1047
 DB 661 AATGCTATGTAAGAACAGAGTATTTCTGAATTAATGAAATTAAGTGAATTTTAC 720
 QY 1048 CAATTAATCTTAAATGAGCACTACAGTGCAGCTTCAAAATGCAATGCTTAAAG 1107
 DB 721 CAATTAATCTTAAATGAGCACTACAGTGCAGCTTCAAAATGCAATGCTTAAAG 780
 QY 1108 TTAGCTATTTAAAGCTACTAATTAAGTACCCATGATCAATTTCTTGTATCAATCAGAC 1167
 DB 781 TTAGCTATTTAAAGCTACTAATTAAGTACCCATGATCAATTTCTTGTATCAATCAGAC 840
 QY 1168 TTGAGCAGGTTACTTGCATTTAAAGAAATTAATGTAATTAATTTATTTGTGCAAAAC 1227
 DB 841 TTGAGCAGGTTACTTGCATTTAAAGAAATTAATGTAATTAATTTATTTGTGCAAAAC 900
 QY 1228 TATGATCTCTTTTAAAGGCTCAACATGCTTAAAGTGAATGACAAAAATGTGTAA 1287
 DB 901 TATGATCTCTTTTAAAGGCTCAACATGCTTAAAGTGAATGACAAAAATGTGTAA 960
 QY 1288 AAAAACCCTGTGTGTTTAAAGGCAACCAAGTACTGAAAAAACTTTGGCAATGCT 1347
 DB 961 AAAAACCCTGTGTGTTTAAAGGCAACCAAGTACTGAAAAAACTTTGGCAATGCT 1020
 QY 1348 ATTGCTAAATCTTACAGATGTAAGAAATGGAATGGAATGGAATCTTCAATTT 1407
 DB 1021 ATTGCTAAATCTTACAGATGTAAGAAATGGAATGGAATGGAATCTTCAATTT 1080
 QY 1408 AATGATGATGCGGGGAAAAATTTGTGTGTGCTGGAATGGAAGCAATTAATGCAATTT 1467
 DB 1081 AATGATGATGCGGGGAAAAATTTGTGTGTGCTGGAATGGAAGCAATTAATGCAATTT 1440
 QY 1468 GTGGAAGCTGCAAAAGCAATTTTAAAGTGTGCTGAGCAACCAAGGTATGATCAGAAAAATGCT 1527

DB 1141 GTGGAAGCTGCAAAAGCATTTTAAAGTGTGCTAGCAACCAAGGTATGAGAAAAATGCT 1200
 QY 1528 GGCAGTGTGGAAGTCCCGGTGCTGTGTATTAACAGCAATGATGATCAATTAATTT 1587
 DB 1201 GGCAGTGTGGAAGTCCCGGTGCTGTGTATTAACAGCAATGATGATCAATTAATTT 1260
 QY 1588 GTTGTGAGTGTATTAATCACTACCAATGTCATGCTTAAAGCTTAAAGAAAGGATGTA 1647
 DB 1261 GTTGTGAGTGTATTAATCACTACCAATGTCATGCTTAAAGCTTAAAGAAAGGATGTA 1320
 QY 1648 AAGCTAAATCTTACCAATTAATGATGCTGATGCTGATGCTTAACTTAAAGAGCTGATGTA 1707
 DB 1321 AAGCTAAATCTTACCAATTAATGATGCTGATGCTGATGCTTAACTTAAAGAGCTGATGTA 1380
 QY 1708 CAACATGCTTAACTTGTGTATTAATGCAAAAGCTGAGCACTATGAAATCTGGCAATA 1767
 DB 1381 CAACATGCTTAACTTGTGTATTAATGCAAAAGCTGAGCACTATGAAATCTGGCAATA 1440
 QY 1768 AACTACATTTGATTTCCCTGGAATTAATGCAATGCTTCCACCAAGATCTCCAAAC 1827
 DB 1441 AACTACATTTGATTTCCCTGGAATTAATGCAATGCTTCCACCAAGATCTCCAAAC 1500
 QY 1828 ACCCCATTTGCTCCAGACACAGTATCAGACAGTGTGTGTAAGCTTGAAGAACTC 1887
 DB 1501 ACCCCATTTGCTCCAGACACAGTATCAGACAGTGTGTGTAAGCTTGAAGAACTC 1560
 QY 1888 AGTGAAGAGAGCTTTTCACTCACTCACTCACTCACTCACTCACTCACTCACTCACT 1947
 DB 1561 AGTGAAGAGAGCTTTTCACTCACTCACTCACTCACTCACTCACTCACTCACTCACT 1620
 QY 1948 TCTAATGAGCCGCTCCCGGAGCAAGTTCAGAGAAATCATTTGTGGAAGCCAGTTTC 2007
 DB 1621 TCTAATGAGCCGCTCCCGGAGCAAGTTCAGAGAAATCATTTGTGGAAGCCAGTTTC 1680
 QY 2008 TCCGAAGTGTAGGCGGCTGTGTGAGAGAACTTTTACACGCGCTTCCCATGAGTTT 2067
 DB 1681 TCCGAAGTGTAGGCGGCTGTGTGAGAGAACTTTTACACGCGCTTCCCATGAGTTT 1740
 QY 2068 CGTGAATCTTAAATGAGGCTTGAATTTGATGAGAGTGTGAGAGGATGCTGTTTC 2127
 DB 1741 CGTGAATCTTAAATGAGGCTTGAATTTGATGAGAGTGTGAGAGGATGCTGTTTC 1800
 QY 2128 TGTGTGAACATTAATTAACCAAGTGGGAGGAGGCTTGGCTTCCCATGATTAAT 2187
 DB 1801 TGTGTGAACATTAATTAACCAAGTGGGAGGAGGCTTGGCTTCCCATGATTAAT 1860
 QY 2188 GTGGAGCTTGTATTAATGATGAAATTTAGAGATTTTACCCAGACTTATGTCGCTGC 2247
 DB 1861 GTGGAGCTTGTATTAATGATGAAATTTAGAGATTTTACCCAGACTTATGTCGCTGC 1920
 QY 2248 AGTTGCTATGAGAGGCTTCAACCATTTTGTGTTAACTTGTAAATTAATGCTTAC 2307
 DB 1921 AGTTGCTATGAGAGGCTTCAACCATTTTGTGTTAACTTGTAAATTAATGCTTAC 1980
 QY 2308 CTGTCTGATTAACAAGTTTGTATGATTAAG 2340
 DB 1981 CTGTCTGATTAACAAGTTTGTATGATTAAG 2013

RESULT 7
 ABZ59573
 ID ABZ59573 standard; DNA; 2380 BP.
 AC ABZ59573;
 XX
 XX
 XX 27-OCT-2003 (revised)
 DT 22-APR-2003 (first entry)
 XX
 XX Human parvovirus B19 clone B1-VPI DNA sequence SEQ ID NO:26.
 DE Human parvovirus B19; parvovirus B19; infection; virus; blood; plasma;
 KW gene; ds.

XX B19 virus.
OS MO2003002753-A2.
XX
XX 09-JAN-2003.
XX
XX 28-JUN-2002; 2002MO-US020684.
XX
XX 28-JUN-2001; 2001US-0302077P.
XX 19-MAR-2002; 2002US-0365956P.
XX 29-MAR-2002; 2002US-0369224P.
XX
XX (CHIR) CHIRON CORP.
XX
XX Pichantes S, Shyamala V,
XX MPI; 2003-201510/19.
XX P-PSDB; ABP57263.
XX
XX Detecting a human parvovirus B19 infection in a biological sample to
XX prevent viral transmission, comprises reacting a parvovirus B19 nucleic
XX acid with a primer complementary to the 3'-terminal portion of the RNA
XX target sequence.
XX
XX Example 4; Fig 6A; 148bp; English.
XX
XX The present invention describes a method for detecting a human parvovirus
XX B19 infection in a biological sample. The method comprises reacting the
XX isolated parvovirus B19 nucleic acid with a first oligonucleotide
XX consisting of a first primer containing a complexing sequence
XX sufficiently complementary to the 3'-terminal portion of the RNA target
XX sequence to complex with. Also described: (1) amplifying a target
XX parvovirus B19 nucleotide sequence; (2) a polynucleotide comprising one
XX of 47 700 base pair sequences (see ABZ59549 to ABZ59569, and ABZ59604 to
XX ABZ59629); (3) a polynucleotide comprising either of 2 4678 base pair
XX sequences (see ABZ59570 and ABZ59571); (4) an oligonucleotide primer
XX consisting of a promoter region recognised by a DNA-dependent RNA
XX polymerase operably linked to a human parvovirus B19-specific complexing
XX sequence of 10-75 nucleotides; (5) an oligonucleotide probe comprising a
XX parvovirus B19-specific hybridising sequence of 10-50 nucleotides linked
XX to an acridinium ester label; and (6) a diagnostic test kit comprising an
XX oligonucleotide primer of (4), and instructions for conducting the
XX diagnostic test. The method is useful for detecting parvovirus infection
XX in a biological sample, such as in blood products, to prevent
XX transmission of the virus through blood and plasma derivatives or by
XX close personal contact. ABZ59549 to ABZ59634 and ABP57262 to ABP57267
XX represent sequences used in the exemplification of the present invention.
XX (Updated on 27-OCT-2003 to standardise OS field)
XX
XX Sequence 2380 BP; 765 A; 498 C; 500 G; 617 T; 0 U; 0 Other;
XX
XX Query Match 38.0%; Score 1912.6; DB 8; Length 2380;
XX Best Local Similarity 88.3%; Pred. No. 0;
XX Matches 2077; Conservative 0; Mismatches 274; Indels 0; Gaps 0;
XX
XX 2331 AGATTGAGTAAACCACTTAACCAATGTGGGAAAGCAAGTGAATTTGCCAGAGACG 2390
XX 18 ACMAAATGAGTAAAGAAAGTGCAAAATGTGGGAAAGTGAATTTGCTTAAGCTG 77
XX
XX 2391 TGTATAGAGAGTGTGGCAATTTTATGAAAGCTACTGACAGACTTATGAGCTTATTC 2450
XX 78 TGTATAGAGAGTGTGGCAATTTTATGAAAGCTACTGACAGACTTATGAGCTTATTC 137
XX
XX 2451 AAAATTTAAAGACATTACAACTTTCTTTAGATTAATCTTTAGAAACCCCTCTTCTT 2510
XX 138 AAATATTAAAGACATTATTAATTTCTTTAGATTAATCTTTAGAAACCCCTCTTCTT 197
XX
XX 2511 TATTGAGCTAGTGTGGCAATTTAAAGTAACTTTAAAGCTTCCAGAGCTTATATGTC 2570
XX 198 TGTTTGCTTAGTGTGGCAATTTAAAGTAACTTTAAAGCTTCCAGAGCTTATATATGTC 257
XX
XX 2571 ATCATTTTCAAGACATGACAGTATCTGACCAACCCCATGCTTATCATTCAGATTAACA 2630

DB 258 ATCATTTTCAAGATCAGTATCTGACCAACCCCATGCTTATCATTCAGATTAACA 317
XX
XX 2631 GTATGTCAGACACTTAAGAGAGAAATGCAATTAATCTTGTGAAGCTTAACAAGCTTG 2690
XX 318 GTATGTCAGACACTTAAGAGAGAAATGCAATTAATCTTGTGAAGCTTAACAAGCTTG 377
XX
XX 2691 GGCAGTTAGCATACATTAATCCCGTACTTAATCTATGTTGGGCTTGCAATGACTCAAG 2750
XX 378 GGCAGTTAGCATACATTAATCCCGTACTTAATCTATGTTGGGCTTGCAATGACTCAAG 437
XX
XX 2751 CTGGGCTTCGCAAGATGCTGTGACAGTGTGCAAGATTCATGACTTTAGGTATATGCC 2810
XX 438 CTGGGCTTCGCAAGATGCTGTGACAGTGTGCAAGATTCATGACTTTAGGTATATGCC 497
XX
XX 2811 AATTGCTAAGTTGGAAATTAATCTTATACATTTGACATGACAGTGAAGATTAATGCT 2870
XX 498 AACTGCTAAGTTGGAAATTAATCTTATACATTTGACATGACAGTGAAGATTAATGCT 557
XX
XX 2871 TAAATAATTAATAAATGAAACAGGGTTCAAGCAACAGAGATTAATTAATCTTACTT 2930
XX 558 TAAATAATTAATAAATGAAACAGGGTTCAAGCAACAGAGATTAATTAATCTTACTT 617
XX
XX 2931 TAAAGGTGAGCTGCTCCCTGTGCCCCATTTTCAAGAAAGTTTACCGGAAGTCCCGCT 2990
XX 618 TAAAGGTGAGCTGCTCCCTGTGCCCCATTTTCAAGAAAGTTTACCGGAAGTCCCGCT 677
XX
XX 2991 ACAAGCTTCAGAAAAATACCCAGATGACTTCACTTCACTTCAAGAACCAAGCACTG 3050
XX 678 ACAAGCTTCAGAAAAATACCCAGATGACTTCACTTCACTTCAAGAACCAAGCACTG 737
XX
XX 3051 GTGCAGGCGGGAGGTAGCAACCCCAAAAAGCATGTGAGTGAAGGGGCTTCACTTCA 3110
XX 738 GTGCAGGCGGGAGGTAGCAACCCCAAAAAGCATGTGAGTGAAGGGGCTTCACTTCA 797
XX
XX 3111 CTGCTAATTTCTGTACGTGTACATTTCTTCAAGCAATTTTCACTTCACTTCACTTCA 3170
XX 798 GTGCAGGCGGGAGGTAGCAACCCCAAAAAGCATGTGAGTGAAGGGGCTTCACTTCA 857
XX
XX 3171 ATCATTTAAGTGTGTTCTCTCAGCAAGTATGCTGCAATGCTGATGGGAAAGAGG 3230
XX 858 ACCATTATTAAGTGTGTTCTCTCAGCAAGTATGCTGCAATGCTGATGGGAAAGAGG 917
XX
XX 3231 CAAAGTGTGACTATTAATGCTTATGAGGAGTCTGCTGAGAGTACTTATGATT 3290
XX 918 CAAAGTGTGACTATTAATGCTTATGAGGAGTCTGCTGAGAGTACTTATGATT 977
XX
XX 3291 TTAATGCTTAAATTTGTTTCTCAGCAATTTAGATTTGAGCACTTAATTTGAAATTTATG 3350
XX 978 TTAATGCTTAAATTTGTTTCTCAGCAATTTAGATTTGAGCACTTAATTTGAAATTTATG 1037
XX
XX 3351 GTATGATAGCTCAGATGCTTAACTGTAATCTTAACTTAAATTTGCTGTAATTAATGCTCA 3410
XX 1038 GAAATGATAGCTCAGATGCTTAACTGTAATCTTAACTTAAATTTGCTGTAATTAATGCTCA 1097
XX
XX 3411 CAGACAAACAGAGAGAGTGTGCAAGTATCTGACAGCAACAGAGAGTGTGTATGCT 3470
XX 1098 CAGACAAACAGAGAGAGTGTGCAAGTATCTGACAGCAACAGAGAGTGTGTATGCT 1157
XX
XX 3471 TAGTGATGATGATGATTAATTAATCCCATATGCTGATAGTCAAGGACAAAGACACTAGCTC 3530
XX 1158 TAGTGATGATGATGATTAATTAATCCCATATGCTGATAGTCAAGGACAAAGACACTAGCTC 1217
XX
XX 3531 CAGAACTGCCCATTTGGGTTTACTTCCGCCCAAGTATGCTTAACTTAACAGTATGAGTAA 3590
XX 1218 CAGAACTGCCCATTTGGGTTTACTTCCGCCCAAGTATGCTTAACTTAACAGTATGAGTAA 1277
XX
XX 3591 TAAACACAGAGAAATTTAGAGAGACAGAAATAATTTGCTGTGTAAGATCAGCTTTT 3650
XX 1278 TTAACACAGAGAAATTTAGAGAGACAGAAATAATTTGCTGTGTAAGATCAGCTTTT 1337
XX
XX 3651 ATGTGTTAGAGCAGATTCATTTGAACTTTGGGTACAGGAGGATCTGCACTATGCTCT 3710

ID	ABZ59576 standard; DNA; 2380 BP.
XX	
AC	ABZ59576;
XX	
DT	27-OCT-2003 (revised)
DT	22-APR-2003 (first entry)
XX	
DE	Human parvovirus B19 clone B6-VPI DNA sequence SEQ ID NO:32.
XX	
KM	Human parvovirus B19; parvovirus B19; infection; virus; blood; plasma; Gene; de.
XX	
OS	B19 virus.
PX	WO200302753-A2.
PN	
PD	09-JAN-2003.
XX	
PF	28-UIN-2002; 2002MO-USO20684.
PR	28-JUN-2001; 2001US-0302077P.
PR	19-MAR-2002; 2002US-0365956P.
PR	29-MAR-2002; 2002US-0369224P.
PA	(CHIR) CHIRON CORP.
PI	Pichantes S, Shyamala V;
XX	
DR	WPI; 2003-201510/19.
DR	P-PADB; ABP57266.
PT	
PT	Detecting a human parvovirus B19 infection in a biological sample to prevent viral transmission, comprises reacting a parvovirus B19 nucleic acid with a primer complementary to the 3'-terminal portion of the RNA target sequence.
PS	Example 4; Fig 9A; 148pp; English.
CC	The present invention describes a method for detecting a human parvovi-
CC	B19 infection in a biological sample. The method comprises reacting the
CC	isolated parvovirus B19 nucleic acid with a first oligonucleotide
CC	consisting of a first primer containing a complexing sequence
CC	sufficiently complementary to the 3'-terminal portion of the RNA target
CC	sequence to complex with. Also described: (1) amplifying a target
CC	parvovirus B19 nucleotide sequence; (2) a polynucleotide comprising one
CC	of 47 700 base pair sequences (see ABZ59549 to ABZ59569, and ABZ59604 to
CC	ABZ59629); (3) a polynucleotide comprising either of 2 4678 base pair
CC	sequences (see ABZ59570 and ABZ59571); (4) an oligonucleotide primer
CC	consisting of a promoter region recognised by a DNA-dependent RNA
CC	polymerase operably linked to a human parvovirus B19-specific complexing
CC	sequence of 10-75 nucleotides; (5) an oligonucleotide probe comprising
CC	parvovirus B19-specific hybridising sequence of 10-50 nucleotides linked
CC	to an acridinium ester label; and (6) a diagnostic test kit comprising an
CC	oligonucleotide primer of (4), and instructions for conducting the
CC	diagnostic test. The method is useful for detecting parvovirus infection
CC	in a biological sample, such as in blood products, to prevent
CC	transmission of the virus through blood and plasma derivatives or by
CC	close personal contact. ABZ59549 to ABZ59634 and ABP57262 to ABP57267
CC	represent sequences used in the exemplification of the present invention. (Updated on 27-Oct-2003 to standardise OS field)
SQ	Sequence 2380 BP; 767 A; 499 C; 498 G; 616 T; 0 U; 0 Other;
Query Match	38.0%; Score 1911; DB 8; Length 2380;
Best Local Similarity	88.3%; Pred. No. 0;
Matches 2076; Conservative	0; Mismatches 275; Indels 0; Gaps 0;

Db TGTATCAGCAATTGTGTAATTTATGAAAAAGTTACTGAGACAGACTTAGACTTATTC 137
Qy 2451 AAATTTTAAAGACATTAACAATTTCTTAGTAATCTTTAGAAAACCCCTCTTCT 2510
Db 138 AAATTTTAAAGACATTAATATTTCTTTAGTAATTTCCCTAGAAAACCCCTCTT 197
Qy 2511 TATTGTACTAGTGTGCTGCAATTAAGATATCTTAAAACTCTCCAGACTTATAGTC 2570
Db 198 TGTGTGACTAGTGTGCTGCAATTAAGATATCTTAAAACTCTCCAGACTTATAGTC 257
Qy 2571 ATCATTTTCAGAGCCATGACAGTTATCTGACACCCCATGCTTATCATCCAGTACA 2630
Db 258 ATCATTTTCAGAGCCATGACAGTTATCTGACACCCCATGCTTATCATCCAGTACA 317
Qy 2631 GTAGTGCAGAACTTAGAGGAAATAGCAATTTATCTAGTGAAGACTTACAGAGCTG 2690
Db 318 GTATGTCAGAACTTAGAGGAAATAGCAATTTATCTAGTGAAGACTTACAGAGCTG 377
Qy 2691 GGCAGTTAGCATATACATTAACCGGTACTATATGTTGGGCTGGGCAATGAGTACAG 2750
Db 378 GGCAGTTAGCATATACATTAACCGGTACTATATGTTGGGCTGGGCAATGAGTACAG 437
Qy 2751 CTGGGCTCCGAGAAATGCTGTGACAGTCTGCAAGATTCATGACTTATAGTATAGCC 2810
Db 438 CTGGGCTCCGAGAAATGCTGTGACAGTCTGCAAGATTCATGACTTATAGTATAGCC 497
Qy 2811 AATTGCTAAGTTGGGAATTAATCTTATACATTTGACGGTACAGATGAAGAATTTGT 2870
Db 498 AACTGGCTAAGTTGGGAATTAATCTTATACATTTGACGGTACAGATGAAGAATTTGT 557
Qy 2871 TAAAAATATAAAAATGAACAGGGTTTCAGAGCAAGAGTAAAGATTAATCTTACTT 2930
Db 558 TAAAAATATAAAAATGAACAGGGTTTCAGAGCAAGAGTAAAGATTAATCTTACTT 617
Qy 2931 TAAAGGTGAGGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2990
Db 618 TAAAGGTGAGGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 677
Qy 2991 ACAAGCTCTGAGAAAAATACCCAGCATGACTTCAAGTAACTCTGCGAAGCCAGCATG 3050
Db 678 ACAAGCTCTGAGAAAAATACCCAGCATGACTTCAAGTAACTCTGCGAAGCCAGCATG 737
Qy 3051 GTGAGGCTGGGAGGTGAGCAACCCCTCAAAAAAGCATGAGTGAAGGGCTTACATTTA 3110
Db 738 GTGAGGCTGGGAGGTGAGCAACCCCTCAAAAAAGCATGAGTGAAGGGCTTACATTTA 797
Qy 3111 CTGCTAATCTGTAACTGTAACTGTAACTGTAACTGTAACTGTAACTGTAACTGTAACT 3170
Db 798 GTGCTAATCTGTAACTGTAACTGTAACTGTAACTGTAACTGTAACTGTAACTGTAACT 857
Qy 3171 ATCATTTTAAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3230
Db 858 ACATTTTAAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 917
Qy 3231 CAAGAAGTGCATTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3290
Db 918 CAAGAAGTGCATTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 977
Qy 3291 TTAATGCTTAAATTTGTTTTTCTCAACATTAAGATTTGAGCACTTAATTTGAAATTAATG 3350
Db 978 TTAATGCTTAAATTTGTTTTTCTCAACATTAAGATTTGAGCACTTAATTTGAAATTAATG 1037
Qy 3351 GTAGTATAGTCCAGATGCTTAACTGTAACTATTTCAAGAAATGCTGTAAAGATGCTCA 3410
Db 1038 GAAGTATAGTCCAGATGCTTAACTGTAACTATTTCAAGAAATGCTGTAAAGATGCTCA 1097
Qy 3411 CAGACAAAACAGAGGAGGTGCAAGTTACTGACACACACACAGAGCTTTGTATAGT 3470
Db 1098 CAGACAAAACAGAGGAGGTGCAAGTTACTGACACACACACAGAGCTTTGTATAGT 1157
Qy 3471 TAGTGATCATGAGTATTAATACCATATGTGCTAGGTCAAGGACAAACACTAGCTC 3530
Db 1158 TAGTGATCATGAGTATTAATACCATATGTGCTAGGTCAAGGACAAACACTAGCTC 1217

Qy 3531 CAGAGCTGCCATTTGGGTTTACTTCCCGCAGTATGCTTACTTAAACAGTATGAG 3590
Db 1218 CAGAGCTGCCATTTGGGTTTACTTCCCGCAGTATGCTTACTTAAACAGTATGAG 1277
Qy 3591 TAAACACAGAGAAATTTGAGAGACAGCAAAAAATTTGGTATGGAATCAGCTTTT 3650
Db 1278 TTAACACAGAGAAATTTGAGAGACAGCAAAAAATTTGGTATGGAATCAGCTTTT 1337
Qy 3651 ATGTGTAGACAGAGTCAATTTGAACTTTTGGGTACAGGGGATCTGCCATATGCTCT 3710
Db 1338 ATGTGTAGACAGAGTCAATTTGAACTTTTGGGTACAGGGGATCTGCCATATGCTCT 1397
Qy 3711 ACAATTTCCAGGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3770
Db 1398 ATAGTGTCTCCAGTCCCGCAGAAATTTAGAGGCTGCACTTATTAAGAA 1457
Qy 3771 TGTACAACTCTTGTAGAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3830
Db 1458 TGTACAACTCTTGTAGAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1517
Qy 3831 AATTGATCATTTGACACAGAAACACAGCAATTTGAGCCAAACTTTATGCTGCGC 3890
Db 1518 AATTGATCATTTGACACAGAAACACAGCAATTTGAGCCAAACTTTATGCTGCGC 1577
Qy 3891 CACTAATTAATTCAGTGTCTACCAAGAGAGAGCAATTTATTAACAGTGTGGAAG 3950
Db 1578 CACTAATTAATTCAGTGTCTACCAAGAGAGAGCAATTTATTAACAGTGTGGAAG 1637
Qy 3951 CCCTTACGGGCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4010
Db 1638 CCCTTACGGGCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1697
Qy 4011 CAGTATCTAGCCATTAACATCACTGAGACCTGATTAATTTGTTACAGAAATTAATGCCA 4070
Db 1698 CAGTATCTAGCCATTAACATCACTGAGACCTGATTAATTTGTTACAGAAATTAATGCCA 1757
Qy 4071 TTTTCAATGAGCAACCACTTATGGAATGCTGAGCAAAAGGTATCAGCAAGGGGTAG 4130
Db 1758 TTTTCAATGAGCAACCACTTATGGAATGCTGAGCAAAAGGTATCAGCAAGGGGTAG 1817
Qy 4131 GAAGATTTCCAAATGAAAAAGAACAGCTTAAGCAAGTTACAAAGTCTTAACTGACACAT 4190
Db 1818 GTAGATTTCCAAATGAAAAAGAACAGCTTAAGCAAGTTACAAAGTCTTAACTGACACAT 1877
Qy 4191 ACTTCCCTAATTAAGAAACCCAACTATACAGACAAATTTGAACGCTCTTATGCTG 4250
Db 1878 ACTTCCCTAATTAAGAAACCCAACTATACAGACAAATTTGAACGCTCTTATGCTG 1937
Qy 4251 GCTCTGTTGGAGACAGAGGCTCTCACTATGAAGTCAAGTGGAGTAAATCCCTTA 4310
Db 1938 GCTCTGTTGGAGACAGAGGCTCTCACTATGAAGTCAAGTGGAGTAAATCCCTTA 1997
Qy 4311 ACTTAGATGACAGTTTAAAACTCAATTTGACAGCCCTAGCGGGTGGTTGCATCAAC 4370
Db 1998 ACTTAGATGACAGTTTAAAACTCAATTTGACAGCCCTAGCGGGTGGTTGCATCAAC 2057
Qy 4371 CACCCCTCAATATTTTAAAAATCTACCAAAAGTGGCCAAATTTGAGGTATTAAT 4430
Db 2058 CACCCCTCAATATTTTAAAAATCTACCAAAAGTGGCCAAATTTGAGGTATTAAT 2117
Qy 4431 CCAATGGAAATTAATCTTATGCTCAATGCTGAGGAAATTAAGACAGTTACCATGACCT 4490
Db 2118 CCAATGGAAATTAATCTTATGCTCAATGCTGAGGAAATTAAGACAGTTACCATGACCT 2177
Qy 4491 TTAATTTGGAGCTCGAAAGGCTACTGAAAGTGAATCCCGAGCTGCGTATATCTC 4550
Db 2178 TTAATTTGGAGCTCGAAAGGCTACTGAAAGTGAATCCCGAGCTGCGTATATCTC 2237
Qy 4551 CTCAGAGCTGTCTATTAACATATGTACTGATGACCCACAGCTACAGATGCAAGC 4610
Db 2238 CGCAGCAGAGGTCTTTTACATATGTACTATATGACCCACAGCTACAGATGCAAGC 2297

Qy	4611	AAACACAGACACGGATATATGAAAAAGCTGAAGATTGTGACTGCCAAAGCCGTHGC	4670
Db	2298	AAACACACAGACATGGATATATGAAAAAGCTGAAGATTGTGACAGCCAAAGCCGTHGC	
Qy	4671	ACCCATTGTAA	4681
Db	2358	ACCCATTGTAA	2368

RESULT 9
AAT14085
ID AAT14085 standard; DNA; 2600 BP.
XX

AC AA114085;
XX

DT	27-AUG-2003	(revised)
DT	06-JUN-1996	(first entry)
XX		

XX human parvovirus B19 genomic sequence (nt200-2700)

non-structural protein 1; NS1; diagnosis; therapy; vaccine; antibody; ds

OS B19 virus.

key	Location/Qualifiers
FT	1. .123
CDS	

FT	primer_bind
FT	

FT	FT	CDS
----	----	-----

primer bind

LE

ET
87

primer_bind

primer bind

1. *Introduction*

1
2
3

primer_bind

primer bind

—

1

primer_bind

primer bind

1

1

primer_bind

١٠٠

"00000000-0000-0000-0000-000000000000"

1000

PF 22-SEP-1995; 95WO-EP003758
XX
PR 22-SEP-1994; 94EP-00114973
XX
PA (WOLF/) WOLF H.
XX

WPI; 1996-188453/19.
P-PSDB; AAR91425, AAR91426.

PT DNA sequence encoding non-structural protein 1 of B19 parvovirus - and
PT related transformed cells, proteins and antibodies, useful for diagnosis
PT treatment and prevention of parvovirus infection.
XX

Fig 1; 41pp; English.
XX

human provirus B19 genome includes a sequence coding for the non-structural protein 1 (NS1) (AAR914126). The NS-1 coding sequence or fragments of it can be amplified by PCR (see AAT1086-97) and inserted into e.g. vector pQE304 for expression in *Escherichia coli*, or into baculovirus transfer vector pVL1192 for expression in insect cells. The encoded peptides have diagnostic and therapeutic applns. The DNA sequence is also used to design diagnostic probes. (Updated on 27-AUG-2003 to correct OS field.)

Quota: Match
2000 BT; 133 A; 411 C; 614 G; 756 T; 0 U; 0 Other

Query Match	37.2%	Score 1868;	DB 2;	Length 2600
Best Local Similarity	84.8%;	Pred. No. 0;		
Matches 2119; Conservative	0;	Mismatches 370.	Indels	

1 TACGCGACAGGAATGACGTAACTGTCCGCATCTTGTACCGGAAGTCCCGCTACCGGC 60
102 GACGTACAGGAATGACGTAAATTTGCCGACCTCTGTACCGGAAGTCCCGCTACCGGC 161
QY 61 GGGACCGCGCGGCATCTGATTTTGAGTGTCTCTTTTGAAATTTTGCGCGGCTTTTCCCG 120
Db 162 GGGACCGCGCGGCATCTGATTTTGAGTGTCTCTTTTGAAATTTTGCGCGGCTTTTCCCG 220
QY 121 CCTATGCAATTAAGCGCGCCATGTTTAATGTTAATTTAATTTAATTTAATTTGAACAAGCCT 180
Db 221 CCTATGCAATTAAGCGCGCCATTTTAAGTGTATTACTAATATTTATTTATTTGTTAGTTTGT 280
QY 181 AAGGTTACTAGGGGGGGAGTTACGG-----GGGTATATTAACGACCTGCTTCCCT 232
Db 281 AAGGTTAAATGGCGGAGCGTAAAGCGGGGACCTACAGATATTAATAGCAACGTTACGCG 340
QY 233 GACACTTCTTTCTGGTGTCTTTGACTGGAACCTACGTGCTGTTCTTTGCGCTCTAAG 292
Db 341 CACCTCTTCTTTCTGGGCTGCTTTTCTGGAACCTTTCTGTGTTTGTGTGACCTAAC 400
QY 293 TAACAGTATTTACTAACTTTTAATTTACTTAACATGAGAGCTATTTGCGGGTGTCTGC 352
Db 401 TAACAGTATTTACTACTTGTAAACCTTAACCTTAACATGAGAGCTATTTAAGGGGTGCTTC 460
QY 353 ACATTTCCCTTAACATTTGCACTGTGTGTAATGATTAATGTGTGCTCTAATGTAGACT 412
Db 461 AAGTTCTCTTAATGTTTCTAAGCTGTGTGTAACGATTAACGTGTGTGCTCTTAATGTGATTT 520
QY 413 TAGATACTTGACTGGGAACAACCTAACCCATCTTAACAGTTTAATGGCAATATATTAA 472
Db 521 TAGACCTTTGACCTGGGAACAACCTAATCTAATTAACAGCTAATATGGCAATATTACTTAA 580
QY 473 GGAAGTGTGCTTCTAATCTGATTTTAATGTGGGGCGCTAGCAGGTGTGCTTAATCTTTT 532
Db 581 GGAAGTGTGCTTCTAAGCTTGAATTTTACCGGGGGCCACTAGCAGGGGTCTTGTACTTTT 640
QY 533 TTCAAGTGAATGAACAATTTAAGAGAAGCTATCATATCATATGATTAATGTGTGCTC 592
Db 641 TTCAGTGAATGAACAATTTGAAGAGAAGCTATCATATCATATGATTAATGTGTGCTC 700

QY 593 CAGACTAAATGCTAGAACTTAAGTGTGCTAGAGAGGTTATTTAATATGTTCTT 652
 DB 701 CAGGGTTAAACCCAGAAACCTTAACAGTGTGTAGAGGGGTTATTTAATATGTTCTT 760
 QY 653 ACCATCTTGAATGAAAGTTTAACTTAAATTTTTCGAGGATGACTACCAAGAA 712
 DB 761 ATACCTTGTACTGAAATGTGAACTTAAATTTTTCGAGGATGACTACCAAGAA 820
 QY 713 AATATTTAGATGAGAGAGGTTTATAGAAATTTAATTAAGAAATTTCTTAA 772
 DB 821 AATATTTAGATGAGAGAGGTTTATAGAAATTTAATTAAGAAATTTCTTAA 880
 QY 773 ATGTGTGTGTGTATTAACAATTTATGACGGGTATATGACACCTGTATTTCCGCTCT 832
 DB 881 ATGTGTGTGTGTGTATTAACAATTTATGATGATATATGATATTTCTGTCTCTT 940
 QY 833 TTGGGCGAGAGCTTGTATGCTTAAAGACCCGCTATTTCTGCAATATACAGAGTCTA 892
 DB 941 TTGAAAGGGGAGCTTGTATGCTTAAAGACCCGCTATTTCTGCAATATATGATCTA 1000
 QY 893 CTATATGAACCTGGGAGCTTGTATGCTTAAAGAGGAGGATTTGTCCTGCTGGAAG 952
 DB 1001 GTATGTATGCTGTGAGAGCTTGTATGCTTAAAGAGGAGGATTTGTCCTGCTGGAAG 1060
 QY 953 GAACAAAGCGGGTTTAAAGTTTCAAACTATGTAATTTGCTATGTAAGACAGATAT 1012
 DB 1061 GAATTAAGCTTATGATTAAGTTTCAAACTATGTAATTTGCTATGTAAGACAGATAT 1120
 QY 1013 TTAATGAATTAATGAAATTTAGTATTTTAACTAATATCTTTATTAATGAGAGTC 1072
 DB 1121 TTAATGAATTAATGAAATTTAGTATTTTAACTAATATCTTTATTAATGAGAGTC 1180
 QY 1073 ACAGTGCACCTTTCAATTAAGTGTGCTTAAAGTATGCTATTTAATGAGAGTC 1132
 DB 1181 ACAGTGAATTTTCAATTAAGTGTGCTTAAAGTATGCTATTTAATGAGAGTC 1240
 QY 1133 TAGTACCACTAGTACATTTCTGTATTAATGAGAGTGTGAGAGGTTTCTGCTTAAAG 1192
 DB 1241 TAGTACCACTAGTACATTTCTGTATTAATGAGAGTGTGAGAGGTTTCTGCTTAAAG 1300
 QY 1193 AAAATTAATTAATGAAATTTATTTATGTCGAAATTAATGATCTCTTTTATGAGTCAAC 1252
 DB 1301 ACATATAATTTGTTAATTTGTTACTTTGTCGAAATTAATGATCTCTTTTATGAGTCAAC 1360
 QY 1253 ATGTGTATGAGTGTGAGAGGATTTGTCGAAATTAATGATCTCTTTTATGAGTCAAC 1312
 DB 1361 ATGTGTATGAGTGTGAGAGGATTTGTCGAAATTAATGATCTCTTTTATGAGTCAAC 1420
 QY 1313 CACCAATGCTGAAATTAATGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1372
 DB 1421 CACCAATGCTGAAATTAATGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1480
 QY 1373 GAATGTGAATTTGAAATTAATGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1432
 DB 1481 GAATGTGAATTTGAAATTAATGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1540
 QY 1433 TGGTCTGGGATGAGGATTTATGATCTATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1492
 DB 1541 TGGTCTGGGATGAGGATTTATGATCTATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1600
 QY 1493 GTGGTCAAGCAACCAAGGATGATCAGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1552
 DB 1601 GTGGTCAAGCAACCAAGGATGATCAGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1660
 QY 1553 CTGTGTATTAACCAAGATGATGATCAGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1612
 DB 1661 CTGTGTATTAACCAAGATGATGATCAGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1720
 QY 1613 CTGTGTATTAACCAAGATGATGATCAGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1672
 DB 1721 CTGTGTATTAACCAAGATGATGATCAGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1780
 QY 1673 GCCCTGACATGGGTTTACTTACAGAGGCTGATGTACAAATTTGCTTAACTTGTGTATG 1732

DB 1781 GCCCTGACATGGGTTTACTTACAGAGGCTGATGTACAAAGTGGCTTACATGCTGTATG 1840
 QY 1733 CACAAAGCTGGAGCCCTATGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1792
 DB 1841 CACAAAGCTGGAGCCCTATGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTCGAAATTTGTC 1900
 QY 1793 TAAATGCAATGGCTTCCACCCAGATCTCCAAACCAACCCCATTTGTCGAGACAGTA 1852
 DB 1901 TTAATGCAATGGCTTCCACCCAGATCTCCAAACCAACCCCATTTGTCGAGACAGTA 1960
 QY 1853 TCAGACAGATGGTGTGAAAGCTGTGAAAGCTGTGAAAGCTGTGAAAGCTGTGAAAGCTGTGAAAGCTGTG 1912
 DB 1961 TCAGACAGATGGTGTGAAAGCTGTGAAAGCTGTGAAAGCTGTGAAAGCTGTGAAAGCTGTGAAAGCTGTG 2020
 QY 1913 TCATCCAGGCGCTGTGAAACAGTAAACCCCGGCTCTAGTATGAGCCGTCGAGGAGCA 1972
 DB 2021 TCATCCAGGCGCTGTGAAACAGTAAACCCCGGCTCTAGTATGAGCCGTCGAGGAGCA 2080
 QY 1973 GTTCAGAGAACTATTTGTGGAAGCCAGTTTCTCCGAAAGTGTAGCCGCTGTGAGG 2032
 DB 2081 GTTCAGAGAACTATTTGTGGAAGCCAGTTTCTCCGAAAGTGTAGCCGCTGTGAGG 2140
 QY 2033 AGGAAGCTTTTTCACAGCCGCTTGCAGATCAGTTTGTGTAATCTTTAGTATGAGGAGTGTACT 2092
 DB 2141 AGGAAGCTTTTTCACAGCCGCTTGCAGATCAGTTTGTGTAATCTTTAGTATGAGGAGTGTACT 2200
 QY 2093 TTGTATGAGATGTGTGAGAGGATTTGCTGT 2152
 DB 2201 ATGTGTGAGATGTGTGAGAGGATTTGCTGT 2260
 QY 2153 GGGAGGGGTTGGGGCTTTGGCCCTCATTTGTATTAATGAGGAGCTGTGATTAATGATGGA 2212
 DB 2261 GGGAGGGGTTGGGGCTTTGGCCCTCATTTGTATTAATGAGGAGCTGTGATTAATGATGGA 2320
 QY 2213 AATTTAGAGATTTTATCTCCAGACTTATGAGTGTGCTGAGTGTGATGAGAGCTTATACC 2272
 DB 2321 AATTTAGAGATTTTATCTCCAGACTTATGAGTGTGCTGAGTGTGATGAGAGCTTATACC 2380
 QY 2273 CATTTTCTGTGTATCTGTGTAATTAATGTCCTTACCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2332
 DB 2381 CATTTTCTGTGTATCTGTGTAATTAATGTCCTTACCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2440
 QY 2333 ATTTAGATTAACCACTTAACTAATGAGTGTGAGAGGATGAGCAATTTGCCAGAGCTG 2392
 DB 2441 ATTTAGATTAACCACTTAACTAATGAGTGTGAGAGGATGAGCAATTTGCCAGAGCTG 2500
 QY 2393 TATAGCACTTTGTGCAATTTTATGAAATTAAGTACTGAAACAGACTTATGAGCTTATCAA 2452
 DB 2501 TATAGCACTTTGTGCAATTTTATGAAATTAAGTACTGAAACAGACTTATGAGCTTATCAA 2560
 QY 2453 ATTTTAAAGACATTTACCACTTTCTTTATGATTAATCC 2490
 DB 2561 ATTTTAAAGACATTTATATATTTCTTTATGATTAATCC 2598

RESULT 10
 AAX81586
 ID AAX81586 standard; DNA; 1662 BP.
 XX AAX81586;
 DT 26-AUG-1999 (first entry)
 XX
 XX Erythrovirus v9 DNA sequence encoding VP2 protein.
 DE Erythrovirus v9; differential diagnosis; parvovirus; infection;
 KM Erythrovirus screening; typing; immunoassay; VP2 protein; ss.
 OS Erythrovirus.
 XX
 XX FR2771751-A1.
 PN
 XX

PD 04-JUN-1999.
XX 03-DEC-1997; 97FR-00015197.
XX 03-DEC-1997; 97FR-00015197.
XX (ASST-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
XX Nguyen QT, Garbary CA, Auguste V;
XX WPI; 1999-349543/30.
XX P-PSDB; AAY23230.
PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
XX diagnosis of its infections.
XX
XX Claim 3; Page 55-57; 80pp; French.
XX
XX The present sequence is derived from nucleotides 3017-4678 of AX81580,
XX and encodes an erythrovirus V9 protein. Probes and primers derived from
XX erythrovirus V9 polynucleotide sequences (AX81580) can be used for
XX differential diagnosis of erythrovirus (parvovirus) infections by a
XX combination of amplification and hybridisation assay. The probes can also
XX be used to assess susceptibility to erythrovirus infection and for
XX erythrovirus screening and typing. The antibodies can be used in
XX immunoassays for diagnosis of erythrovirus V9 infections
XX
XX Sequence 1662 BP; 523 A; 359 C; 354 G; 426 T; 0 U; 0 Other;
XX
XX Query Match 33.1%; Score 1662; DB 2; Length 1662;
XX Best Local Similarity 100.0%; Pred. No. 0;
XX Matches 1662; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3017 ATGACTTCAGTTAACTCTGACAGAACGCACTGTGTGAGGGGAGGTAGCAACCT 3076
DB 1 ATGACTTCAGTTAACTCTGACAGAACGCACTGTGTGAGGGGAGGTAGCAACCT 60
QY 3077 ACAAAGCATGTGAGTGAAGAGGGGCTTAACTGCTAATTCTGTAACGTGTACATTC 3136
DB 61 ACAAAGCATGTGAGTGAAGAGGGGCTTAACTGCTAATTCTGTAACGTGTACATTC 120
QY 3137 TCTAGGCAATTTTAAATTCATATGATCCAGAGCATATTAAGTGTCTCTCCAGCA 3196
DB 121 TCTAGGCAATTTTAAATTCATATGATCCAGAGCATATTAAGTGTCTCTCCAGCA 180
QY 3197 GCTAGTGTGCTCCGACATGCTAGTGAAGAGGCAAAAGTGTGCACTTATGCTCCAT 3256
DB 181 GCTAGTGTGCTCCGACATGCTAGTGAAGAGGCAAAAGTGTGCACTTATGCTCCAT 240
QY 3257 ATGGGGTACTCTACTCCGTGGAGATCTTAGATTTTAAATGCTTAAATTTGTTTCTCA 3316
DB 241 ATGGGGTACTCTACTCCGTGGAGATCTTAGATTTTAAATGCTTAAATTTGTTTCTCA 300
QY 3317 CCATTAGAGTTTACGCACTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTA 3376
DB 301 CCATTAGAGTTTACGCACTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTA 360
QY 3377 GTAACTATTTTCAAGAAATGCTGTAAAGATGTCAAGACAAAGAGAGAGTGTGCA 3436
DB 361 GTAACTATTTTCAAGAAATGCTGTAAAGATGTCAAGACAAAGAGAGAGTGTGCA 420
QY 3437 GTTACGTAGACGACCAAGAGCTTTGTGTATGTTAGTGATCATAGATTAATACCA 3496
DB 421 GTTACGTAGACGACCAAGAGCTTTGTGTATGTTAGTGATCATAGATTAATACCA 480
QY 3497 TATGTCTAGGTCTAGGAGCAAGACATAGTCTCCAGAACTGCTTTGGTTTACTTT 3556
DB 481 TATGTCTAGGTCTAGGAGCAAGACATAGTCTCCAGAACTGCTTTGGTTTACTTT 540
QY 3557 CCCCCCAATGATGCTTACTTAAACATAGTGAAGTAAACAACAAGAAATTTCCAGAGAC 3616
DB 541 CCCCCCAATGATGCTTACTTAAACATAGTGAAGTAAACAACAAGAAATTTCCAGAGAC 600

QY 3617 AGCAAAAATTTGGCTAGTGAAGATGACGTTTTTATGTGTAGACAGATTCATTGAA 3676
DB 601 AGCAAAAATTTGGCTAGTGAAGATGACGTTTTTATGTGTAGACAGATTCATTGAA 660
QY 3677 CTTTGGGTACAGGGGATCTGCACTATGTCTTACAAATTTCCAGTGTGCCCCAGAA 3736
DB 661 CTTTGGGTACAGGGGATCTGCACTATGTCTTACAAATTTCCAGTGTGCCCCAGAA 720
QY 3737 AACCTAGAGGCTGACGACCAACTTTTATGAATGTACACCTTTGTACGTTCTCGT 3796
DB 721 AACCTAGAGGCTGACGACCAACTTTTATGAATGTACACCTTTGTACGTTCTCGT 780
QY 3797 TTAGGGGTACCTGACACATTAAGAGGGGACCCCTAAATTTAGATCTTGAACAAGAC 3856
DB 781 TTAGGGGTACCTGACACATTAAGAGGGGACCCCTAAATTTAGATCTTGAACAAGAC 840
QY 3857 CAGCAATTCAGACCAAACTTTATGCTGTGGGCACTAATTAATTCAGTGTCTACAA 3916
DB 841 CAGCAATTCAGACCAAACTTTATGCTGTGGGCACTAATTAATTCAGTGTCTACAA 900
QY 3917 GAAGAGACAAATTCATACAGGTGTGGAAGAGGCTTTAGGGGCTTATGATCTGCACT 3976
DB 901 GAAGAGACAAATTCATACAGGTGTGGAAGAGGCTTTAGGGGCTTATGATCTGCACT 960
QY 3977 AGCCAAACACCAAAATTTCCCTACGCCCCGGGCAATGATCTACGCCATACATCCTG 4036
DB 961 AGCCAAACACCAAAATTTCCCTACGCCCCGGGCAATGATCTACGCCATACATCCTG 1020
QY 4037 GACACTGATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4096
DB 1021 GACACTGATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 1080
QY 4097 AATGCTGAGACAAAGATATCAGCAAGGGGTAGAGATTTCCAAATGAAGAAAGACAG 4156
DB 1081 AATGCTGAGACAAAGATATCAGCAAGGGGTAGAGATTTCCAAATGAAGAAAGACAG 1140
QY 4157 CTTAGAGCTTACAGGCTTAAATGATGACACATCTTCCCTAATTAAGAAACCAACAA 4216
DB 1141 CTTAGAGCTTACAGGCTTAAATGATGACACATCTTCCCTAATTAAGAAACCAACAA 1200
QY 4217 TACACAGCAAAATTTGAACGCTCTTATGTGTGGGCTGTGTTGGAACAGAAAGCTCTT 4276
DB 1201 TACACAGCAAAATTTGAACGCTCTTATGTGTGGGCTGTGTTGGAACAGAAAGCTCTT 1260
QY 4277 CACTATGAAAGTGTGCTGTGATGAATTAATCCCTTACCTTAATGATGACAGTTTAAACTCA 4336
DB 1261 CACTATGAAAGTGTGCTGTGATGAATTAATCCCTTACCTTAATGATGACAGTTTAAACTCA 1320
QY 4337 TTTCAGCCCTAGGCGGGGTGGGTTTGCAATCAACGACCCCTCAATATTTTAAATAA 4396
DB 1321 TTTCAGCCCTAGGCGGGGTGGGTTTGCAATCAACGACCCCTCAATATTTTAAATAA 1380
QY 4397 CTACCAAAAGTGGGCAATTTGAGGTATTAATTCATGAGGAATTAATTAATTAATTA 4456
DB 1381 CTACCAAAAGTGGGCAATTTGAGGTATTAATTCATGAGGAATTAATTAATTAATTA 1440
QY 4457 TATGCTGTGGAATTAATGACATGATTAACCACTTAAATTTGAGCTGTGAAGCTACT 4516
DB 1441 TATGCTGTGGAATTAATGACATGATTAACCACTTAAATTTGAGCTGTGAAGCTACT 1500
QY 4517 GGAAGGTGAATCCCAAGCTGTGGTTTATCTCTCTGATGACGCTGTCAATTAACATAT 4576
DB 1501 GGAAGGTGAATCCCAAGCTGTGGTTTATCTCTCTGATGACGCTGTCAATTAACATAT 1560
QY 4577 GTACTGTATGACCCCAAGCTACATATGAAAGCAACCAAGACGATATGAAG 4636
DB 1561 GTACTGTATGACCCCAAGCTACATATGAAAGCAACCAAGACGATATGAAG 1620
QY 4637 CTTGAAGATTTGTGACTGTCCAAAGCCGTGTGACCCATTTG 4678
DB 1621 CTTGAAGATTTGTGACTGTCCAAAGCCGTGTGACCCATTTG 1662

RESULT 11
 ID AAA91321
 AAA91321 standard; DNA; 2016 BP.
 AC AAA91321;
 DT 11-SEP-2003 (revised)
 DT 19-JUN-2001 (first entry)
 DE Orf1 protein coding sequence.
 XX
 XX Fusion nucleic acid library; Rep protein; tumour cell; apoptosis;
 KM nucleic acid modification enzyme; cell death; decreased cell growth;
 KM protein-protein interaction detection; cell division; cancer therapy;
 KM protein drug discovery; pharmacogenetics; orf1 protein; ds.
 XX
 XX B19 virus.
 OS
 FH Key Location/Qualifiers
 FT CDS 1..2016
 FT /tag= a
 FT /product= "orf1 protein"
 PN MO20014539-A2.
 XX
 XX 01-MAR-2001.
 XX
 XX 18-AUG-2000; 2000MO-US022906.
 PF
 XX 20-AUG-1999; 99US-0150004P.
 PR 02-JUN-2000; 2000US-0209130P.
 XX
 XX (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
 PA
 PI Li M;
 XX
 XX WPI: 2001-218443/22.
 DR P-PDB; AAY97731.
 DR
 XX
 XX New library of fusion nucleic acids each encoding a Rep protein
 PT recognized by a nucleic acid modification enzyme and a candidate protein,
 PT useful for detecting protein-protein interactions, protein drug discovery
 PT or pharmacogenetics.
 PS
 PS Disclosure; Fig 44; 106pp; English.
 XX
 XX This sequence encodes the Erythrovirus B19 orf1 protein. The invention
 CC relates to a library of fusion nucleic acids, each encoding a Rep
 CC protein, a candidate protein, a presentation structure, a targeting
 CC sequence or a label. The Rep protein is a nucleic acid modification
 CC enzyme. The random or directed libraries (including the cDNA libraries)
 CC can be introduced into any tumour cell, and peptides identified which by
 CC themselves induce apoptosis, cell death, loss of cell division or
 CC decreased cell growth. The methods and compositions may also be used to
 CC detect protein-protein interactions, protein drug discovery, particularly
 CC for protein drugs that interact with targets on cell surfaces, to
 CC discover DNA or nucleic acid binding proteins, using nucleic acids as
 CC targets, to screen for nucleic acid modification enzymes with decreased
 CC toxicity for the host cells, to identify or generate Rep proteins with
 CC decreased toxicity, improved enzyme attachment sequences for use in
 CC expression vectors and in pharmacogenetic studies. The method is useful
 CC in cancer therapy and in killing tumour cells. The methods can be
 CC combined with other cancer therapeutics (drugs or radiation) to sensitize
 CC cells and thus induce rapid and specific apoptosis, cell death, loss of
 CC cell division or decreased cell growth after exposure to a secondary
 CC agent. (Updated on 11-SEP-2003 to standardise OS field)
 CC
 XX
 XX Sequence 2016 BP; 607 A; 361 C; 479 G; 569 T; 0 U; 0 Other;

Query Match 31.5%; Score 1585.6; DB 4; Length 2016;
 Best Local Similarity 86.7%; Pred. No. 0;
 Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;

Qy	328	ATGAGCTATTTCGGGGTGTCTTGACATTTCCCTTAACATTCGTGACCTGTAATGAT	387
Db	1	ATGAGCTATTTCGGGGTGTCTTGACATTTCCCTTAACATTCGTGACCTGTAATGAT	60
Qy	388	AACTGGTGTGCTCTATGCTAGACTTAAGATCTTGTGACCTGGAACCACTAACCATTC	447
Db	61	AACTGGTGTGCTCTTACTGATGATTTAGACACTTGTGACCTGGAACCACTAACCATTC	120
Qy	448	AACAGATTATGCAATATATTTAAGCAGTGTGCTTCTTAACCTGATTTTACGGGGGG	507
Db	121	AACAGATTATGCAATATATTTAAGCAGTGTGCTTCTTAACCTGATTTTACGGGGGG	180
Qy	508	CGCTGACAGGTTGCTTAATCTTTTTCAGGGGAATGTAACAATTTGAGAAGCTAT	567
Db	181	CGCTGACAGGTTGCTTGTACTTTTTCAGTGAATGTAACAATTTGAGAAGCTAT	240
Qy	568	CATATCCATGTACTTATTTGCTGTCAGACATAATGCTAGAACTTAACCTGTGTGCTA	627
Db	241	CATATCCATGTACTTATTTGCTGTCAGACATAATGCTAGAACTTAACCTGTGTGCTA	300
Qy	628	GAAGGTTTATTTAATAATGTTCTTTACATCTTGTAACTGAAAGTGTAACTTAATTT	687
Db	301	GAGGGGTTATTTAATAATGTTCTTTACATCTTGTAACTGAAAGTGTAACTTAATTT	360
Qy	688	TTGCCAGGATGACTCAAAAGGAATATTTAGATGAGAGCAGTTTATGAAAT	747
Db	361	TTGCCAGGATGACTCAAAAGGAATATTTAGATGAGAGCAGTTTATGAAAT	420
Qy	748	TACTTAATGAAAAAATTCCTTTAAATGTTGTGTGTGTAACTTAATTTGACGGGTAT	807
Db	421	TACTTAATGAAAAAATTCCTTTAAATGTTGTGTGTGTAACTTAATTTGATGATAT	480
Qy	808	ATAGACACTGTATTTCCGCTCTTTTGGCGAGAGCTTGTATGCTAAAGACCCCGC	867
Db	481	ATAGATACCTGTATTTCTGTCTTCTTTAGAGGGGAGCTTGCATGCAAGAAACCCCGC	540
Qy	868	ATTACTGCAAAATCAGACAGTGTCTAATTAATGAAATCGGGAGCTGTGAGGGGGA	927
Db	541	ATTACTGCAAAATCAGACAGTGTCTAATTAATGAAATCGGGAGCTGTGAGGGGGA	600
Qy	928	GATGTTGTGCTATTCGCTGGAAGGAACAAAGCGGGGTTTAAAGTTTCAACCATGTA	987
Db	601	GAGTTGTGCTATTTAATGGAAGGAACAAAGCGGTAGCATTAAGTTTCAACCATGTA	660
Qy	988	AATTGCTATGTGAAAACAGAGTATTTACTGAAGATTAATGAAATTAATGATTTTAC	1047
Db	661	AATTGCTATGTGAAAACAGAGTATTTACTGAAGATTAATGAAATTAATGATTTTAC	720
Qy	1048	CAATATACCTTATTAATGACACTCAAGTGGAGCTTCAATTCGAAGTGCCTTAAG	1107
Db	721	CAATATACCTTATTAATGACACTCAAGTGGAGCTTCAATTCGAAGTGCCTTAAG	780
Qy	1108	TTAGCTATTTAATAAGCTACTAATTAAGTACCACTGATCTTCTGTATACATTCAGAC	1167
Db	781	CTAGCAATTTAATAAGCACTAATTTAGTCCCTAGTACGACATTTTATGCAATGAGAC	840
Qy	1168	TTTGAAGAGTACTTGCAATTAAGAAATTAATTAATTAATTTATTTGTGTCAAAC	1227
Db	841	TTTGAAGAGTACTTGCAATTAAGAAATTAATTAATTAATTTATTTGTGTCAAAC	900
Qy	1228	TATGATCCTCTTTAGTGGGTCAACATGTGTAAAGTGAATGCAAAAAATGTGTAA	1287
Db	901	TATGATCCTCTTTAGTGGGTCAACATGTGTAAAGTGAATGCAAAAAATGTGTAA	960
Qy	1288	AAAAAACCCTGTGTTTACGGGCCAACAGTACTGAAAAAACAATTTGCAATGCT	1347
Db	961	AAAAAACCCTGTGTTTATGCGGCCAACAGTACGAAAAAACAATTTGCAATGCT	1020
Qy	1348	ATTGCTAAAACTGTACAGATGTATGGAATGTGAATTTGGAATATGAAAACTTTCATTT	1407
Db	1021	ATTGCTAAAACTGTACAGATGTATGGAATGTGAATTTGGAATATGAAAACTTTCATTT	1080
Qy	1408	AATGATGTAGCGGGAAAAAGTTGTGTGTCTGGAATGAAGCATTTAATGTCACATAT	1467

```

Db      1081 AATGATGTAGCAGGAAAGCTTGTGTCTGGAGGAGTATTTAAGCTACATTT 1140
Qy      1468 GTGAAAGCTGCAAAACCCATTTTAAAGTGTGACAGCAACAGGGTATGAGAAAAATGCGT 1527
Db      1141 GTTAAAGCTGCAAAACCCATTTTAAAGTGTGACAGCAACAGGGTATGAGAAAAATGCGT 1200
Qy      1528 GGCAGTGTGGCAGTGTGCGCGGTGTGCTGTGTATTAACAGCAATGTGACATTT 1587
Db      1201 GGAAGTGTAGCTGTGCTGGAGTACCTGTGTATTAACAGCAATGTGACATTT 1260
Qy      1588 GTTGTAGTGTATTAACCTACACTGTGACATGCTTAAAGCCTTAAAGGAGGATGTA 1647
Db      1261 GTTGTAGGCGGAAACCTAACCAACTGTACATGCTTAAAGCCTTAAAGGAGGATGTA 1320
Qy      1648 AAGCTAACTTACCAATAGATGTAGCCCTGACATGGGTTTACTTACAGAGGCTGATGTA 1707
Db      1321 AAGTTAACTTACCTGTATGATGACAGCCCTGACATGGGTTTACTTACAGAGGCTGATGTA 1380
Qy      1708 CAACATGTGCTTACTTGTGTATGACCAAAAGCTGGACCACTATGAAAATGCGGCAATA 1767
Db      1381 CAACATGTGCTTACTTGTGTATGACCAAAAGCTGGACCACTATGAAAATGCGGCAATA 1440
Qy      1768 AACTACATTTGATTTCCCTGGATTAATGCAATGCCCTCCACCCAGATCTCCAAACC 1827
Db      1441 AACTACATTTGATTTCCCTGGATTAATGCAATGCCCTCCACCCAGATCTCCAAACC 1500
Qy      1828 ACCCCATTTGTCAGACAGCAAGTATCAGACAGAGTGTGTGAAGAGCTGAGAACTC 1887
Db      1501 ACCCCATTTGTCAGACAGCAAGTATCAGACAGAGTGTGTGAAGAGCTGAGAACTC 1560
Qy      1888 AGTGAAGCAGCTTTTCAACCTCATCTCAGCGCCCTGGAACAGTGAACCCCGCGC 1947
Db      1561 AGTGAAGCAGCTTTTCAACCTCATCTCAGCGCCCTGGAACAGTGAACCCCGCGC 1620
Qy      1948 TCTAGTACGCCCTGTCGCCGAGCACTTCCAGAGATCTTTCGGAAGCCAGTTTC 2007
Db      1621 TCTAGTACGCCCTGTCGCCGAGCACTTTCGGAAGATCTTTCGGAAGCCAGTTTC 1680
Qy      2008 TCCGAATGTGATGCGCGCTGTGGAAGAGCTTTTCAACCGCCCTGCGATCAGTTT 2067
Db      1681 TCCGAATGTGATGCGCGCTGTGGAAGAGCTTTTCAACCGCCCTGCGATCAGTTT 1740
Qy      2068 CGTGAACCTTGTAGAGGGGTTGACTTTGTATGGAATGTGAGAGGATGCTGTTGC 2127
Db      1741 CGTGAACCTTGTAGAGGGGTTGACTTTGTATGGAATGTGAGAGGATGCTGTTGC 1800
Qy      2128 TGTGTGAACATATTAACAACAGTGGGGAGAGGTTGGGCTTTCCTCATTTATTAAT 2187
Db      1801 TGTGTGAACATATTAACAACAGTGGGGAGAGGTTGGGCTTTCCTCATTTATTAAT 1860
Qy      2188 GTGGAGCTGTGTATATATGATGAGAAATTTAGAGATTTACTCAGACTTATGCGCTGC 2247
Db      1861 GTGGAGCTGTGTATATATGATGAGAAATTTAGAGATTTACTCAGACTTATGCGCTGC 1920
Qy      2248 AGTTGTATGTAGAGAGCTCTTAACCATTTTCTGTATTAAGTTTAAATGTGCTTAC 2307
Db      1921 AGCTGTCAATGTGGAGAGCTTCTATTCCTTTCTGTCTAACTCAGCAAAAATGTGCTTAC 1980
Qy      2308 CTGTGTGAATTAACAAGTTTGTAGATTTAGATTA 2343
Db      1981 CTGTGTGAATTAACAAGCTTTGTAGATTTAGATTA 2016

```

RESULT 12
AAD46149

ID AAD46149 standard; DNA; 2016 BP.

AC AAD46149;

XX 29-AUG-2003 (revised)
DT 27-DEC-2002 (first entry)
XX

```

DE      Erythrovirus B19 orf1 protein encoding DNA.
XX
XX      Nucleic acid modification enzyme; NAM; enzyme attachment sequence; EAS;
XX      protein design automation; PDA; cancer; protein-protein interaction;
XX      infection; gene therapy; orf1 protein; gene; ds.
OS      B19 virus.
XX
XX      Key      Location/Qualifiers
XX      CDS      1..2016
XX      FT      /*tag= a
XX      FT      /product= "Erythrovirus B19 orf1 protein"
XX
XX      WO200268453-A2.
XX
XX      06-SEP-2002.
XX
XX      19-FEB-2002; 2002WO-US004853.
XX
XX      22-FEB-2001; 2001US-00792629.
XX
XX      (XENC-) XENCOR INC.
XX
XX      Li M, Dahiyat BI;
XX
XX      WPI: 2002-691653/74.
XX      P-PDB; AAE28655.
XX
XX      Generating a library of fusion nucleic acids for treating cancer or
XX      infection, or detecting protein-protein interaction, comprises providing
XX      computationally-derived library of candidate protein sequences and
XX      expression vectors.
XX
XX      Disclosure, Page 228-229, 246pp; English.
XX
XX      The present invention relates to a novel method of generating a library
XX      of fusion nucleic acids. The method involves providing a computationally-
XX      derived library of candidate protein sequences and creating a library of
XX      expression vectors containing a fusion nucleic acid having a sequence
XX      encoding a nucleic acid modification (NAM) enzyme and a sequence encoding
XX      a candidate protein sequence from the library and an enzyme attachment
XX      sequence (EAS) that is recognised by the NAM enzyme. The invention also
XX      relates to the use of a variety of computational methods including protein
XX      design automation (PDA). The method is useful in generating and screening
XX      fusion nucleic acids that may be used in treating cancer or infections,
XX      in detecting protein-protein interactions, discovery of DNA or nucleic
XX      acid binding proteins, protein drug discovery, screening for NAM enzymes
XX      with decreased toxicity to the host cells and NAM enzyme/EAS pairs with
XX      increased affinity or in pharmacogenetic studies. The invention is also
XX      used in gene therapy. The present sequence is Erythrovirus B19 orf1
XX      CC protein encoding DNA. This sequence is used to illustrate the method of
XX      the invention. (Updated on 29-AUG-2003 to standardise OS field)
XX
XX      Sequence 2016 BP; 607 A; 361 C; 479 G; 569 T; 0 U; 0 Other;
XX
XX      Query Match      31.5%; Score 1585.6; DB 6; Length 2016;
XX      Best Local Similarity 86.7%; Pred. No. 0;
XX      Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;
XX
Qy      328 ATGAGATATTTGGGGTGTCTTGCACATTTCTCTTAACATTTGTGAGCTGTGTAATGAT 387
Db      1 ATGAGATATTTAGAGGGGTGTCTCAAGTTTCTTCAATGTTCTGAGCTGTCAACGAT 60
Qy      388 AACTGTGTGTCTCTATAGCTAGACTTGAATATCTTGACGTGGGAACCACTAACCATTTCT 447
Db      61 AACTGTGTGTGTCTCTTATCTGATTTAGACATCTTGTGAGCACTGGAACCACTAATCTACT 120
Qy      448 AACGATTAATGCAATATATTTAAGCAGTGTGCTTCTTAACTTGAATTTACTGCGGCG 507
Db      121 AACGACTAATGCAATATATTTAAGCAGTGTGCTTCTTAACTTGAATTTACTGCGGCGG 180
Qy      508 CCGCTAGCAGTGTGCTTATATTTTGTAGGTGAATGTAACAAATTTGAGGAAGCTAT 567

```

```

Db      181 CCAATGACAGGCTGCTGTACTTTTCAAGTAAATGTAACAATTTGAGAGGCTAT 240
Qy      568 CATATCATGTAGTATTATGTCAGGACTAAATGCTAGAACTTAACGTGTGCTA 627
Db      241 CATATCATGTGTATGTTATGTCAGGCTGTAACCCAGAAACCTCACTATGTGTGA 300
Qy      628 GAAGTTTATTTATTAATGTTCTTACCATCTTGTAACTGAAAGTGTAACTTAAATT 687
Db      301 GAGGGGTATTATTAATATGTAATCTTATCACTGTATCTGAAATGGAAGCTAAATTT 360
Qy      688 TTGCGAGGATGACTACCAAGGAAATTTTATGAGATGAGAGCACTTTATGAAAT 747
Db      361 TTGCGAGGATGACTACCAAGGAAATCTTATGAGATGAGAGCACTTTATGAAAT 420
Qy      748 TACTTAATGAAAAAATTCCTTTAAATGTTGTGTGTGTATCAAAATATTAGCGGTAT 807
Db      421 TATTATATATAAAAAATACCTTTAAATGTTGTGTGTATCAAAATATTAGATAT 480
Qy      808 ATAGACACTGTATTTCCGCTCTTTTCGCGAGAGACTTGTCAATGCTAAAGCCCGC 867
Db      481 ATGATATACCTGTATTTCTGTACTTTTGAAGGGGACTTGCATGCCAAGAAACCCCGC 540
Qy      868 ATTAGCTCAAAATACAGACAGTGTACTAATGAAATGAGGAGTGTAGCTGTGAGGGGA 927
Db      541 ATTACCAACAGCCAAATATGATTAAGTGTAGTGTGCTGAGGAGTCTAGCGGCAAGGGGA 600
Qy      928 GATGTTGTGCTATTCGCTGGAAGGGAACAAAGCGGGGTTAAAGTTTCAACATGTGA 987
Db      601 GAGGTGTGCTATTTATGGAAGGGAACAAAGCTGATTAAGTTTCAACATGTGA 660
Qy      988 AATTGCTATGTGAAAAAGAGATTTTACTGAAGATTAATGAAATTAATGATTTTAAAC 1047
Db      661 AACTGTGTGTGAAAAAGAGATTTTACTGAAGATTAATGAAATTAATGATTTTAAAC 720
Qy      1048 CAATATATCTTTATTAAGTACAGTGTGAGCTTCAATTAAGTGTGCTTAAAG 1107
Db      721 CAGTACCTTTATTAAGTACAGTGTGAGCTTCAATTAAGTGTGCTTAAAG 780
Qy      1108 TTATGCTATTTATTAAGTACTTAATTAATGAAATTAATTAATGCTTGTACATTCAGAC 1167
Db      781 CTAGCAATTTATTAAGCACTTAATTAATGCTTCAATTAATGCTTGTACAGAC 840
Qy      1168 TTGAGAGGCTTACTGCTTAAAGAAATTAATTAATTAATTAATTAATGCTTAAAG 1227
Db      841 TTGAGAGGCTTACTGCTTAAAGAAATTAATTAATTAATTAATTAATGCTTAAAG 900
Qy      1228 TATGATCTCTTTTATGAGGTCAACATGTGTATGATGATGATGATGATGATGATGAT 1287
Db      901 TATGATCTCTTTTATGAGGTCAACATGTGTATGATGATGATGATGATGATGATGAT 960
Qy      1288 AAAAAACCTGTGTGTTTACGGGCCCAAGTATGGAATAATTTGGCAATGGCT 1347
Db      961 AAAAAACCTGTGTGTTTATGAGGTCAACATGTGTATGATGATGATGATGATGATGATGAT 1020
Qy      1348 ATTGCTTAAATCTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1407
Db      1021 ATTGCTTAAATCTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1080
Qy      1408 AATGATGTAGCGGGAATTTGAGGTCTGAGGATGAGGATTTATTAAGTCCATAT 1467
Db      1081 AATGATGTAGCGGGAATTTGAGGTCTGAGGATGAGGATTTATTAAGTCCATAT 1440
Qy      1468 GTGGAAGCTCAAAAGCATTTTATGATGATGATGATGATGATGATGATGATGATGATGAT 1527
Db      1141 GTGGAAGCTCAAAAGCATTTTATGAGGTCAACATGATGATGATGATGATGATGATGATGAT 1200
Qy      1528 GGCAGTGTGCAAGTCCCGGTGTGCTGTGTTTAAACAGCAATGATGATGATGATGATGATGAT 1587
Db      1201 GGCAGTGTGCTGTGCTGTGCAAGTCTGTGTTTAAACAGCAATGATGATGATGATGATGATGAT 1260
Qy      1588 GTTGTGATGTATATCACTTACATGTGTGATGATGATGATGATGATGATGATGATGATGAT 1647
Db      1261 GTTGTGATGTGATCACTTACATGTGTGATGATGATGATGATGATGATGATGATGATGATGAT 1320

```

```

Qy      1648 AAGCTAACTTTTACATTAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1707
Db      1321 AAGTTAACTTTTACATTAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1380
Qy      1708 CAACAAATGCTTAACTTGTGTATATGCAAAAGCTGAGGCACTATGAAAACTGGGCAATA 1767
Db      1381 CAACAAATGCTTAACTTGTGTATATGCAAAAGCTGAGGCACTATGAAAACTGGGCAATA 1440
Qy      1768 AACTTACATTTTATTTTCTGTGATTAATGCAATGATGATGATGATGATGATGATGATGATGATGAT 1827
Db      1441 AACTTACATTTTATTTTCTGTGATTAATGCAATGATGATGATGATGATGATGATGATGATGATGAT 1500
Qy      1828 ACCCATGTTGCTGAGACACAGTATCAGAGAGTGTGTGTAAGGCTGTGAAGAACTC 1887
Db      1501 ACCCATGTTGCTGAGACACAGTATCAGAGAGTGTGTGTAAGGCTGTGAAGAACTC 1560
Qy      1888 AGTGAAGCAGCTTTTTCATCACTTCACTCCAGGCGCTGGAACAGTGAACCCCGCGC 1947
Db      1561 AGTGAAGCAGCTTTTTCATCACTTCACTCCAGGCGCTGGAACAGTGAACCCCGCGC 1620
Qy      1948 TCTAGTACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2007
Db      1621 TCTAGTACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1680
Qy      2008 TCCGAGTGTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2067
Db      1681 TCCGAGTGTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1740
Qy      2068 CGTGAACCTGTTATGAGGCTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2127
Db      1741 CGTGAACCTGTTATGAGGCTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1800
Qy      2128 TGTGTGAACATTAATAACAACAGTGTGAGGCTTGTGATGATGATGATGATGATGATGATGATGATGATGAT 2187
Db      1801 TGTGTGAACATTAATAACAACAGTGTGAGGCTTGTGATGATGATGATGATGATGATGATGATGATGATGAT 1860
Qy      2188 GTGGAAGCTTGTGATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2247
Db      1861 GTGGAAGCTTGTGATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1920
Qy      2248 AGTTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2307
Db      1921 AGTTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1980
Qy      2308 CTGTCTGATTAACAAGTTTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2343
Db      1981 CTGTCTGATTAACAAGTTTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2040

RESULT 13
AAd4611
ID      AAd4611 standard; DNA; 2016 BP.
XX
XX      AAd4611;
AC      29-AUG-2003 (revised)
DT      13-DEC-2002 (first entry)
XX
XX      Erythrovirus B19 orf1 DNA.
DE
XX      Prokaryotic library; candidate protein; nucleic acid modification; NAM;
KW      enzyme attachment sequence; EAS; clinical pharmacology; chemical sensor;
KW      enzymology; cosmetic research; toxic; environmental safety assessment;
KW      nutrient biology; coat protein; gene; ds.
XX
OS      B19 virus.
XX
XX      Key      Location/Qualifiers
XX      CDS      1..2016
XX      FT      /tag= a
XX      FT      /product= "Erythrovirus B19 orf1 protein"

```


PN W020026653-A2.

XX 29-AUG-2002.

XX 14-DEC-2001; 2001MO-US049058.

XX 14-DEC-2000; 2000US-0256163P.

XX (XENC-) XENCOR INC.

XX Li M, Liu Y;

XX WPI; 2002-667068/71.

XX P-PSDB; AAE26951.

PT New library of prokaryotic pET-24a expression vectors, host cells or
PT nucleic acid/protein conjugates, useful for screening candidate proteins
PT and their nucleic acids or modification enzymes for pharmacogenetic
PT analysis.

PS Disclosure; Fig 44; 127pp; English.

CC The invention relates to methods and compositions for the construction of
CC prokaryotic libraries expressing candidate proteins and the use of these
CC libraries to identify candidate proteins and the nucleic acids encoding
CC them. The invention provides a library of prokaryotic pET-24a vectors
CC comprising a fusion nucleic acid consisting of a nucleic acid encoding a
CC nucleic acid modification (NAM) enzyme or a candidate protein, or a
CC the candidate protein, and an enzyme attachment sequence (EAS) recognised
CC by the NAM enzyme. The library is used for identifying candidate proteins
CC and nucleic acids encoding these proteins, in screening for NAM enzymes
CC with decreased toxicity for the host cells, or in identifying novel or
CC improved EASs, which may be used for understanding cellular processes or
CC (NAM) conjugates are useful in diagnostic assays and in research
CC including clinical pharmacology, functional genomics, pharmacogenomics,
CC agricultural chemicals, environmental safety assessment, chemical sensors,
CC nutrient biology, cosmetic research and in assays with target molecules.
CC in vitro screening techniques and in assays with target molecules. The
CC present sequence is Bvhrvovirus B19 ori DNA used in the invention. (The
CC (updated on 29-AUG-2003 to standardise OS field)

SQ Sequence 2016 BP; 607 A; 361 C; 479 G; 569 T; 0 U; 0 Other;

Query Match 31.5%; Score 1585.6; DB 6; Length 2016;
Best Local Similarity 86.7%; Pred. No. 0;

Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;

QY 328 ATGAGCTATTTCGGGCTGCTTGCACATTTCCCTTAACATTGCTGCTGCTATGAT 387
DB 1 ATGAGCTATTTCGGGCTGCTTGCACATTTCCCTTAACATTGCTGCTGCTATGAT 387
QY 388 AACCTGGTGTCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 447
DB 61 AACCTGGTGTCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 447
QY 448 AACGATTAATGCAATATATTAAGCAGTGTCTTAACTTGATTTTACGCGGCG 507
DB 121 AACGATTAATGCAATATATTAAGCAGTGTCTTAACTTGATTTTACGCGGCG 507
QY 508 CGGCTGCAAGTGTCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 180
DB 181 CGGCTGCAAGTGTCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 180
QY 568 CATATCCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 627
DB 241 CATATCCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 627
QY 628 GAAGGTTTATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 687
DB 301 GAAGGTTTATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 687

QY 688 TTCCAGAGATGACTACCAAGAAATATTTAGAGATGAGAGAGCTTTATGAAAT 747
DB 361 TTCCAGAGATGACTACCAAGAAATATTTAGAGATGAGAGAGCTTTATGAAAT 747
QY 748 TACTTAATGAAATATTTCCCTTAAATGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 807
DB 421 TACTTAATGAAATATTTCCCTTAAATGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 807
QY 808 ATGACACCTGTATTTTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 867
DB 481 ATGACACCTGTATTTTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 867
QY 868 ATTACTGCAATATGACAGAGTGTCTATTAATGAACTGCGAGATCTGCTGCTGCTGCTGCTGCTGCT 927
DB 541 ATTACTGCAATATGACAGAGTGTCTATTAATGAACTGCGAGATCTGCTGCTGCTGCTGCTGCTGCT 927
QY 928 GATGTTGTGCAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 987
DB 601 GATGTTGTGCAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 987
QY 988 AATTGCTATGTAAGAAACAGATATTTTCTGAAGTAAATGAAATTTAGTATTTTATAC 1047
DB 661 AATTGCTATGTAAGAAACAGATATTTTCTGAAGTAAATGAAATTTAGTATTTTATAC 1047
QY 1048 CATATATCTTTATTAAGTATGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1107
DB 721 CATATATCTTTATTAAGTATGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1107
QY 1108 TTAGCTATTTTAAAGCTATTAATCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1167
DB 781 TTAGCTATTTTAAAGCTATTAATCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1167
QY 1168 TTGAGCAGTGTCTTATGAGTATTAAGAAATATTAATGTAATTTATTTATTTATTTATTTATTTATTT 1227
DB 841 TTGAGCAGTGTCTTATGAGTATTAAGAAATATTAATGTAATTTATTTATTTATTTATTTATTTATTT 1227
QY 1228 TATGATCTCTTTTATGAGTATTAAGAAATATTAATGTAATTTATTTATTTATTTATTTATTTATTT 1287
DB 901 TATGATCTCTTTTATGAGTATTAAGAAATATTAATGTAATTTATTTATTTATTTATTTATTTATTT 1287
QY 1288 AAAAACAACCTGT 1347
DB 961 AAAAACAACCTGT 1347
QY 1348 ATTGCTTAAATCTGTATGAGTATTAAGAAATATTAATGTAATTTATTTATTTATTTATTTATTTATTT 1407
DB 1021 ATTGCTTAAATCTGTATGAGTATTAAGAAATATTAATGTAATTTATTTATTTATTTATTTATTTATTT 1407
QY 1408 AATGATGATGAGGAGAAAGT 1467
DB 1081 AATGATGATGAGGAGAAAGT 1467
QY 1468 GTGGAAGCTGCAAAAGCAATTTTATGAGTATTAAGAAATATTAATGTAATTTATTTATTTATTTATTT 1527
DB 1141 GTGGAAGCTGCAAAAGCAATTTTATGAGTATTAAGAAATATTAATGTAATTTATTTATTTATTTATTT 1527
QY 1528 GCGAGTGTGAGT 1587
DB 1201 GCGAGTGTGAGT 1587
QY 1588 GTTGTGAGTGTATTAATCACTAATCTGTGATGCTTAAAGCTTAAAGAAAGGATGTA 1647
DB 1261 GTTGTGAGTGTATTAATCACTAATCTGTGATGCTTAAAGCTTAAAGAAAGGATGTA 1647
QY 1648 AAGCTAATCTTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1707
DB 1321 AAGCTAATCTTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1707
QY 1708 CAACATGAGCTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1767
DB 1381 CAACATGAGCTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1767
QY 1768 AACTACATTTGATTTCCCTGGAATTAATGCAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1827


```

Db      1441 AACCTACCTTTGATTTCCCTGGAAATTAAGCAGATCCCTCCACCCAGACCTCCAAACC 1500
Qy      1828 ACCCCCTTTGTCACGACACGATATCAGACGAGTGTGTGAAGACTCTGAAGAACTC 1887
Db      1501 ACCCCATTTGTACAGACACAGATATCAGACGAGTGTGTGAAGACTCTGAAGAACTC 1560
Qy      1888 AGTGAAGAGCTTTTCAACCTCATCATCCAGGCGCTGGAAACAGTGAACCCCGCGC 1947
Db      1561 AGTGAAGAGCTTTTCTTAACCTCATCATCCAGGCGCTGGAAACAGTGAACCCCGCGC 1620
Qy      1948 TCTAGTACGCGCCGTCGCCGAGACCACTTCAAGAGAAATCATTTTTCGGAAGCCAGTTTC 2007
Db      1621 TCTAGTACGCGCCATCCCGGAGACCACTTCAAGAGAAATCATTTTTCGGAAGCCAGTTTC 1680
Qy      2008 TCCGAAGTGTAGCCGCTGTGTGGAGAGAACTTTTACACGCGCTTCGCGATCACTTT 2067
Db      1681 TCCGAAGTGTAGCTGTGTGTGGAGAGAACTTTTACACACCTTTGGCAGACCACTTTT 1740
Qy      2068 CGTGAACCTTTAGTGGGCTTGAACCTTTGTATGGGATGTGTGGAGGAGGATTCCTGTTGC 2127
Db      1741 CGTGAACCTTTAGTGGGCTTGAACCTTTGTATGGGATGTGTGGAGGAGGATTCCTGTTGT 1800
Qy      2128 TGTGTGGAACATATTAACAACAGTGGGAGGAGGCTTGGCCCTCATTTGTATTAAT 2187
Db      1801 TGTGTGGAACATATTAACAACAGTGGGAGGAGGCTTGGGACCTTTGCTCCCATTCATTAAT 1860
Qy      2188 GTGGAGAGCTTGTATTAATGAATGAAGAAATTTAGAGAGTTTACTCAGACTAGTGCCTGC 2247
Db      1861 GTAGGAGGCTTGTATTAATGAATGAAGAAATTTAGAGAGTTTACTCAGACTAGTGCCTGT 1920
Qy      2248 AGTTGCATGTAGAGGCTCTAACCCATTTTCTGTATTAATCTGTAATAATGTGCTTAC 2307
Db      1921 AGCTGCCATGTGGAGCTTCTTAATCCCTTTCTGTGCTAACCTGCAAAAATGTGCTTAC 1980
Qy      2308 CTGTCTGATTAACAAGTTTGTAGATTAGATTA 2343
Db      1981 CTGTCTGATTAACAAGCTTTGTAGATTAGATTA 2016

RESULT 14
ABX96680
ID      ABX96680 standard; DNA; 2016 BP.
XX
AC      ABX96680;
XX
DT      27-OCT-2003 (revised)
DT      14-MAY-2003 (first entry)
XX
DE      Nonstructural protein sequence from Erythrovirus B19 , DNA.
XX
KW      Rep protein; ds; gene; capture probe; expression vector;
KW      nucleic acid protein conjugate; NAP; enzyme attachment sequence; EAS;
KW      biochip; gene expression profiling; mutation detection; Rep68; Rep78;
KW      nonstructural protein; NS1; major coat protein; U94.
XX
OS      B19 virus.
XX
PN      US2002172968-A1.
XX
PD      21-NOV-2002.
XX
PF      19-FEB-2002; 2002US-00080376.
XX
PR      22-FEB-2001; 2001US-00792630.
XX
PA      (LIUH/) LIU H.
PA      (DAHI/) DAHIYAT B I.
PA      (LIHM/) LI M.
XX
PI      Liu H, Dahiyat BI, Li M;
XX
WPI; 2003-310986/30.

```

```

DR      P-PSDB; ABU64876.
XX
PT      New composition comprising a substrate consisting of an array of capture
PT      probes hybridized to an expression vector or to a nucleic acid protein
PT      conjugate, useful for diagnostic test, gene expression profiling or
PT      mutation detection.
XX
PS      Disclosure; Fig 44; 125pp; English.
XX
CC      The invention relates to a composition comprising a substrate comprising
CC      an array of capture probes hybridized to an expression vector or to a
CC      nucleic acid protein conjugate. The capture probes are hybridized to an
CC      expression vector or to a nucleic acid protein (NAP) conjugate. The
CC      vector comprises: (a) a fusion nucleic acid; (b) a capture sequence; and
CC      (c) an enzyme attachment sequence (EAS). The NAP conjugate comprises: (a)
CC      a fusion polypeptide; and (b) an expression vector. The fusion nucleic
CC      acid comprises a nucleic acid encoding the NAP enzyme or candidate
CC      protein. The fusion polypeptide comprises a Rep and candidate protein.
CC      The EAS and NAP enzyme are covalently attached. Also included are
CC      detecting the presence of a target analyte in a sample, making biochips,
CC      and making NAP conjugates. The composition is useful for diagnostic
CC      applications, gene expression profiling or mutation detection. The
CC      present sequence encodes a viral Rep (or related protein e.g. Rep68,
CC      Rep78, nonstructural protein, NS1, major coat protein or U94 protein) for
CC      use in the composition of the invention. (Updated on 27-OCT-2003 to
CC      standardise OS field)
XX
SQ      Sequence 2016 BP; 607 A; 361 C; 479 G; 569 T; 0 U; 0 Other;
XX
Query Match      31.5%; Score 1585.6; DB 7; Length 2016;
Best Local Similarity 86.7%; Pred. No. 0;
Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;
Qy      328 ATGAGACTATTTGGGGGTGCTTGACATTTCTCTTAACATTTGCACTGTGCTAATGAT 387
Db      1 ATGAGACTATTTAGAGGGGTGCTTCAAGTTCTTCTTAATGTTCTGACCTGTCAACAGAT 60
Qy      388 AACTGTGTGCTCTATGCTAGACTAGATCACTTGCAGCTGGGAAACCACTAACCCATTCT 447
Db      61 AACTGTGTGCTCTTCTTCTGATTTAGACACTTGTGACCTTGTGAGCTTCACTCACTACT 120
Qy      448 AACGATTAATGCAATATATTTAAGCAGTGTGCTTCTTAACCTTGAATTTTACTGCGGGG 507
Db      121 AACGACTAATGCAATATATCTTAAGCAGTGTGCTTCTTAAGCTTGAATTTTACTGCGGGG 180
Qy      508 CCGCTAGCAGGTTGCTTAATCTTTTCAAGTGTGAATGAACAATTTGAGAAAGCTAT 567
Db      181 CCACTAGCAGGGTGTGCTTCTTTTCAAGTGAATGAACAATTTGAGAAAGCTAT 240
Qy      568 CATATCATGTATTAATGTTGTGCTCCAGACTAAATGCTAAGAACTTAATCTGTGTGCTA 627
Db      241 CATATCATGTGTATTAATGTTGTGCTCCAGAGGCTTAACCCCAAGAACTCACTATGTGTGTA 300
Qy      628 GAAGGTTATTTAATATGTTCTTTACATCTTGTAACTGAAGTGTAACTTAATTT 687
Db      301 GAGGGTTATTTAATATGACTTTTACCTTGTAACTGAAGTGTAAAGTAAATTT 360
Qy      688 TTGCCAGGATGACTACCAAGAAATATTTTGAAGATGAGAGCAGTTTATAGAAAT 747
Db      361 TTGCCAGGATGACTACCAAGAAATATCTTTAGAGATGAGAGCAGTTTATAGAAAT 420
Qy      748 TACTTAATGAAAAAATCTCTTAATGTTGTGTGTGTATCAAAATATTTAGCGGTAT 807
Db      421 TATTTAATAAAAAATCACTTTAAATGTTGTGTGTGTATCTAATATTTATGATAT 480
Qy      808 ATAGACACCTGTATTTCCGCTCTTTTGGCGAGAGCTTGTATGTATTAAGAACCCCGC 867
Db      481 ATAGATACCTGTATTTCTGTACTTTTGAAGGAGCTTGTCCATGCCAAGAAACCCCGC 540
Qy      868 ATTACTGCAATATCAGACAGTGTCTAATGAATACTGGGAGTCTAGCTGTGAGAGGGGA 927
Db      541 ATTACCAAGCCATTAATGATTAAGTATGATGATGATGTGGGAGTCTAGCGGCAAGGGGCA 600

```

```

QY 928 GATGTTGCGCAATGCTGGAGAAAGGAAACAAAGCGGGTTAAGTTCAACCATGCTA 987
Db 601 GAGGTGTGCGCAATTAATGGAAGGAACTAAGGCTAGCATTAAGTTCAACCATGCTA 987
QY 988 AATGCGCTATGTAAGAAACAGAGTATTTCTGAAGTAATGAAATTAAGGATTTTAC 1047
Db 661 AACTGTTGTGTGAAACAGAGTGTATTAAGAGATTAAGGAACTAAGTTGATTTAC 1047
QY 1048 CAATTAATCTTATTAATGAGAGTCAAGTGGAGCTTTCAAAATTCAGATGCTTAAG 1107
Db 721 CAGTACATTTACTAGAGAGTACAGTGGAGGTTTCAAAATTCAGATGCTTAAG 1107
QY 1108 TTAGCTATTTAATAGCTACTAATCTTAAGCCATAGTCAATTTGTATGATGAG 1167
Db 781 CTAGCAATTTAATAGGAACTAATTTAGTCTACTAGCAATTTTATTTGATTAAGAG 840
QY 1168 TTGAGAGAGGTTACTTCTCATTTAAGAAATTAATTAATTTATTTGTTGCTAAAC 1227
Db 841 TTGAGAGAGGTTATGTTATTTAAGCAATTAATTAATTTGTTGCTAAAC 900
QY 1228 TATGATCTCTTTTATGAGGCTCAACATGTTAAGTGTATGACAAATAATGTTGTA 1287
Db 901 TATGATCTCTTTTATGAGGCTCAACATGTTAAGTGTATGACAAATAATGTTGTA 960
QY 1288 AAAAACAACCTGTGTTTACGGGCAACAGTACGTAAGAAACAAATTTGGCAATGCT 1347
Db 961 AAAAATACACTGTGTTTATGAGGCTCAACAGTACGTAAGAAACAAATTTGGCAATGCT 1020
QY 1348 ATTGCTAAACCTGTACAGTGTATGAGATGTTGATTTGAAATTAAGAAATTTCCATT 1407
Db 1021 ATTGCTAAACCTGTACAGTGTATGAGATGTTGATTTGAAATTAAGAAATTTCCATT 1080
QY 1408 AATGATGATGAGGAGGAAAGTTGAGTGTGTTGAGTGAATGAGCATTTAAGTCACTAT 1467
Db 1081 AATGATGATGAGGAGGAAAGTTGAGTGTGTTGAGTGAATGAGCATTTAAGTCACTAT 1140
QY 1468 GTGGAAGCTGCAAAAGCAATTTAGTGTGTCAGCAACAGGATGATCGAATAATGCT 1527
Db 1141 GTGGAAGCTGCAAAAGCAATTTAGTGTGTCAGCAACAGGATGATCGAATAATGCT 1200
QY 1528 GGCAGTGTGAGAGTGGCGGCTGTGCTGTGTTAAACAGCAATGTTGATTTACATTT 1587
Db 1201 GGCAGTGTGAGAGTGGCGGCTGTGCTGTGTTAAACAGCAATGTTGATTTACATTT 1260
QY 1588 GTTGTGATGATTAATACCACTACATGTCATGCTAAGCTTTAAAGAGCGCATGTA 1647
Db 1261 GTTGTGATGATGATTAATACCACTACATGTCATGCTAAGCTTTAAAGAGCGCATGTA 1320
QY 1648 AAGCTAAACCTTACATTAAGTATGAGCTTGAATGAGCTTTTACAGAGGCTGATGTA 1707
Db 1321 AAGCTAAACCTTACATTAAGTATGAGCTTGAATGAGCTTTTACAGAGGCTGATGTA 1380
QY 1708 CAACATGAGCTTAATGCTGTGTAATGACAAAGCTGGAGCACTAATGAAATGCGGCA 1767
Db 1381 CAACATGAGCTTAATGCTGTGTAATGACAAAGCTGGAGCACTAATGAAATGCGGCA 1440
QY 1768 AACTACATTTATTTCTGTAATTAATGAGATGCTTCCACCCAGATCTCCAAAC 1827
Db 1441 AACTACATTTATTTCTGTAATTAATGAGATGCTTCCACCCAGATCTCCAAAC 1500
QY 1828 ACCCCATGTTGTCAGACACAGTATCAGAGAGTGTGAGAAAGCTTGAAGACTC 1887
Db 1501 ACCCCATGTTGTCAGACACAGTATCAGAGAGTGTGAGAAAGCTTGAAGACTC 1560
QY 1888 AGTGAAGAGAGCTTTTCAACTCATCTCAAGCGCTGGAAACAGTGAACCCCGGC 1947
Db 1561 AGTGAAGAGAGCTTTTCAACTCATCTCAAGCGCTGGAAACAGTGAACCCCGGC 1620
QY 1948 TCTAGTACGCGCTGCGGAGCAAGTTCAGAGAAATATTTGTCGAAAGCCGATTTCC 2007
Db 1621 TCTAGTACGCGCTGCGGAGCAAGTTCAGAGAAATATTTGTCGAAAGCCGATTTCC 1680
QY 2008 TCCGAAGTGTAGCGCGCTGCTGGAGAGAGCTTTTACAGCGCGCTTGCAGATCAGTTT 2067

```

```

Db 1681 TCCGAAGTGTAGCTGCACTGTGGAGAAAGCTTTTACACACTTTGGCAGACAGTTT 1740
QY 2068 GCTGAACCTGTTAGTAGGGGTTGACTTTGTATGAGAGTGTGAGGGGATTTGCTTTGC 2127
Db 1741 CGTGAACCTGTTAGTAGGGGTTGACTTTGTATGAGAGTGTGAGGGGATTTGCTTTGC 1800
QY 2128 TGTGTGAACATTAATAACCAAGTGGGAGGAGGCTTTGAGGCTTATGATTAAT 2187
Db 1801 TGTGTGAACATTAATAACCAAGTGGGAGGAGGCTTTGAGGCTTATGATTAAT 1860
QY 2188 GTGGAGCTGTGATATATGATGAGAAATTTAGAGATTTACCCAGACTAATGCTGCTGC 2247
Db 1861 GTGGAGCTGTGATATATGATGAGAAATTTAGAGATTTACCCAGACTAATGCTGCTGC 1920
QY 2248 AGTTGATCTAGAGAGCTCTTAACCATTTTCTGTATTAATTTAAATAATGCTCTAC 2307
Db 1921 AGCTGCAATGTGGAGCTTCTAATCCCTTTCTGTGTACCTGCAAAAATGCTTAC 1980
QY 2308 CTGTCTGATTAACAAGTTTGTGATTAATGAGTAA 2343
Db 1981 CTGTCTGATTAACAAGCTTTGATTAATGAGTAA 2016

```

RESULT 15

ABX96535
ID ABX96535 standard; DNA; 2016 BP.

AC ABX96535;

DT 27-OCT-2003 (revised)

DT 14-MAY-2003 (first entry)

DE DNA encoding an Erythrovirus open reading frame 1, orf1.

KW Gene; ds; biochip; capture probe; nucleic acid modification enzyme; NAM;

KW enzyme attachment sequence; EMS; single-nucleotide polymorphism; SNP;

XX protein-protein interaction.

OS B19 virus.

PN US2002168640-A1.

PD 14-NOV-2002.

PF 22-FEB-2001; 2001US-00792630.

PR 22-FEB-2001; 2001US-00792630.

PA (LIMM/) LI M.

PA (DAHI/) DAHIYAT B I.

PI LI M, Dahiya B I.

DR WPI: 2003-298722/29.

DR P-PSDB; AB064771.

PT Biochip composition useful for creating protein biochips for detecting target analyte in a sample, has substrate having array of capture probes hybridized to nucleic acid/protein conjugate.

PS Disclosure; Fig 44; 123pp; English.

CC The invention discloses a biochip composition comprising a substrate having an array of capture probes, which are hybridized to a nucleic acid (NA)/protein (NAP) conjugate containing a fusion polypeptide, comprising a NA modification (NAM) enzyme and a candidate protein, and an expression vector, comprising a NA encoding NAM enzyme and a candidate protein fusion, a capture sequence and enzyme attachment sequence (EAS). The biochip composition is useful for detecting the presence of a target analyte in a sample, by contacting the sample with a biochip comprising the compositions under conditions where target analytes can bind to at least one of the candidate proteins to form an assay complex and

CC detecting the presence of target analyte on the substrate. The target
CC analyte is labelled with a fluorescent label and the method further
CC comprises adding a labelled soluble binding ligand to the assay complex.
CC The biochip compositions are useful for creating protein biochips which
CC are useful in diagnosing (detecting the presence of specific target
CC analytes), screening (looking for target analytes that bind to specific
CC proteins) and single-nucleotide polymorphism (SNP) analysis. The bioassay
CC chips are used in assays to determine protein-protein interactions. The
CC target analyte can be nucleic acid, drug, drug analogues or products. The
CC biochip compositions allow rapid and facile creation of protein biochips.
CC The sequences presented in ABX96514-ABX96536 are the DNAs encoding the
CC proteins disclosed in the invention. (Updated on 27-OCT-2003 to
CC standardise OS field)

XX Sequence 2016 BP; 607 A; 361 C; 479 G; 569 T; 0 U; 0 Other;

Query Match 31.5%; Score 1585.6; DB 7; Length 2016;

Best Local Similarity 86.7%; Pred. No. 0;

Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;

QY 328 ATGAGCTATTTGGGGGTGCTTGCACATTTCCCTTAACATTCGAGCTGTGCTAATGAT 387
DB 1 ATGAGCTATTTAGAGGGGTGCTTCAAGTTCTTAATGTTCGAGCTGTGCTAATGAT 60
QY 388 AACTGGTGTGCTCTATGCTAGATTAATCTGAGTGGGAAACCACTAACCCATTC 447
DB 61 AACTGGTGTGCTCTTACTGATTTAGACATTTCTGAGTGGGAAACCACTAATCTACT 120
QY 448 AACAGATTAATGCAATATATTTAAGCAGTGTGCTTCTAATCTTGAATTTTACGCGGG 507
DB 121 AACAGATTAATGCAATATATTAAGCAGTGTGCTTCTAAGCTTGAATTTTACGCGGG 180
QY 508 CCGGTAGCAGGTGCTTACTTCTTTTTCAGGTGGAATGAACAATTTGAGAGGCTAT 567
DB 181 CCACTGACAGGTGCTTCTTCTTCTTCAAGTGAATGAACAATTTGAGAGGCTAT 240
QY 568 CATATCATGTATGTTATGTCGAGTGAATGCTAATGCTAATGCTGATGCTGTA 627
DB 241 CATATCATGTATGTTATGTCGAGTGAATGCTAATGCTAATGCTGATGCTGTA 300
QY 628 GAAAGTTATTTAATAATGTTCTTTTACCATCTTGTAACTGAAGTGTAAATTT 687
DB 301 GAAAGTTATTTAATAATGTTCTTTTACCATCTTGTAACTGAAGTGTAAATTT 360
QY 688 TTGCCAGGATGACTACCAAGAAATATTTTGAATGAGAGGCTTTATGAAAT 747
DB 361 TTGCCAGGATGACTACCAAGAAATATTTTGAATGAGAGGCTTTATGAAAT 420
QY 748 TACTTATGAAAAAATTCCTTTAATGTTGTGAGTGAACAATTTGACGGGTAT 807
DB 421 TACTTATGAAAAAATTCCTTTAATGTTGTGAGTGAACAATTTGACGGGTAT 480
QY 808 ATAGACACTGTATTTCCGCTTTTTCGCGAGAGACTTGTCTAAGTAAAGACCCGCG 867
DB 481 ATAGACACTGTATTTCCGCTTTTTCGCGAGAGACTTGTCTAAGTAAAGACCCGCG 540
QY 868 ATTAGCTCAATATCAGCAGTGTCTAATGAATCTGGGAGTGTACTGTGAGGGGGA 927
DB 541 ATTAGCTCAATATCAGCAGTGTCTAATGAATCTGGGAGTGTACTGTGAGGGGGA 600
QY 928 GATGTTGTGCAATTCGCTGGAAGGGAACAAGCGGGTTAAAGTTCAACCAATGCTA 987
DB 601 GATGTTGTGCAATTCGCTGGAAGGGAACAAGCGGGTTAAAGTTCAACCAATGCTA 660
QY 988 AATGCTATGTGAAAAAGAGATTTTATCTGAAGATTAATGGAATTTAGTGATTTTAC 1047
DB 661 AATGCTATGTGAAAAAGAGATTTTATCTGAAGATTAATGGAATTTAGTGATTTTAC 720
QY 1048 CAATATATCTTTATTAAGTACGACAGTGTGCGCTTTCAATTTCAAGTGTCTTAAG 1107
DB 721 CAATATATCTTTATTAAGTACGACAGTGTGCGCTTTCAATTTCAAGTGTCTTAAG 780
QY 1108 TTAGCTATTTATAAGCTACTAATCTAGTACCCACTAGTACATTCCTGTATACATTCAGAC 1167

DB 781 CTAGCAATTTATAAGCACTAATTTAGTCCCTAGACACATTTTATGCTATACAGAC 840
QY 1168 TTGAGCAGGTACTTGCATTTAAGAAATTAATATGTAATATATGTCCTCAAAAC 1227
DB 841 TTGAGCAGGTACTTGCATTTAAGCAATTAATATGTAATATATGTCCTCAAAAC 900
QY 1228 TATGATCTCTTTTAAAGGCTCAACATGTTAAGGATGAGTGAACAAAAATGTGTAA 1287
DB 901 TATGATCTCTTTTAAAGGCTCAACATGTTAAGGATGAGTGAACAAAAATGTGTAA 960
QY 1288 AAAAACCCTGTGTTTAAAGGCTCAACATGTTAAGGATGAGTGAACAAAAATGTGT 1347
DB 961 AAAAACCCTGTGTTTAAAGGCTCAACATGTTAAGGATGAGTGAACAAAAATGTGT 1020
QY 1348 ATTGCTAATACTGATCAATGATGTAATGGAATGGAATTAATGGAATTTTCCATTT 1407
DB 1021 ATTGCTAATACTGATCAATGATGTAATGGAATGGAATTAATGGAATTTTCCATTT 1080
QY 1408 AATGATGAGCGGGGAAAAAGTTGAGTGTGCTGGGATGGAAGGCTTTAATGTCATATT 1467
DB 1081 AATGATGAGCGGGGAAAAAGTTGAGTGTGCTGGGATGGAAGGCTTTAATGTCATATT 1140
QY 1468 GTGGAAGCTGCAAAAAGCAATTTTAAAGGCTCAACCAAGGCTAATCAAGAAATGCGT 1527
DB 1141 GTGGAAGCTGCAAAAAGCAATTTTAAAGGCTCAACCAAGGCTAATCAAGAAATGCGT 1200
QY 1528 GGCAGTGTGCGAGTCCCGGTGTGCTGTGTTATTAACAGCAATGTGATCAATTAATT 1587
DB 1201 GGCAGTGTGCGAGTCCCGGTGTGCTGTGTTATTAACAGCAATGTGATCAATTAATT 1260
QY 1588 GTTGTAGAGGTAAATCACTAATGTCATGCTAAGCTTAAAGCAAGCAAGGATGTA 1647
DB 1261 GTTGTAGAGGTAAATCACTAATGTCATGCTAAGCTTAAAGCAAGCAAGGATGTA 1320
QY 1648 AACCTAATCTTTACCAATAGATGATGACCTGATGAGGCTTTTACATGAGGCTGATGTA 1707
DB 1321 AACCTAATCTTTACCAATAGATGATGACCTGATGAGGCTTTTACATGAGGCTGATGTA 1380
QY 1708 CAACAATGTGCTAATCTGTGTATGCAACAAGCTGAGCACTATGTAATTAATGAGCAATA 1767
DB 1381 CAACAATGTGCTAATCTGTGTATGCAACAAGCTGAGCACTATGTAATTAATGAGCAATA 1440
QY 1768 AACTCAATTTATTTTCCCTGGAATTAATGAGATGCTCCACACGAGCTTCAAAAC 1827
DB 1441 AACTCAATTTATTTTCCCTGGAATTAATGAGATGCTCCACACGAGCTTCAAAAC 1500
QY 1828 ACCCCATTTGCTCCAGACACAGTATCAGAGCAGTGTGTAAGGCTTGAAGAACTC 1887
DB 1501 ACCCCATTTGCTCCAGACACAGTATCAGAGCAGTGTGTAAGGCTTGAAGAACTC 1560
QY 1888 AGTGAAGCAGCTTTTCAACTCATCACTCAAGCGCTGGAACAGTGAACCCGCGCG 1947
DB 1561 AGTGAAGCAGCTTTTCAACTCATCACTCAAGCGCTGGAACAGTGAACCCGCGCG 1620
QY 1948 TCTAGTACGCGCTCCCGGAGCAGTTCAGAGGAATCAATTTGCGGAAGCCAGTTTC 2007
DB 1621 TCTAGTACGCGCTCCCGGAGCAGTTCAGAGGAATCAATTTGCGGAAGCCAGTTTC 1680
QY 2008 TCCGAAGTGTAGCCGCTGTGAGGAGGAAGCTTTTCAACGCGCTTGCATCACTT 2067
DB 1681 TCCGAAGTGTAGCCGCTGTGAGGAGGAAGCTTTTCAACGCGCTTGCATCACTT 1740
QY 2068 CGTGAACCTGTATGAGGCTTGAATTTGATGAGATGCTGTGAGGAGATTCCTGTTTC 2127
DB 1741 CGTGAACCTGTATGAGGCTTGAATTTGATGAGATGCTGTGAGGAGATTCCTGTTTC 1800
QY 2128 TGTGTGAACATTAATAACAAGTGTGAGGAGGCTTGTGGGCTTGGCTCATGTAATTAAT 2187
DB 1801 TGTGTGAACATTAATAACAAGTGTGAGGAGGCTTGTGGGCTTGGCTCATGTAATTAAT 1860
QY 2188 GTGAGAGCTTGTATATGATGAAATTTAGAGATTTTACACATTTAGTGTGCTGC 2247

Db 1861 GTAGGGGCTTGTATATGATGAGAAATTCAGAAATTTACCCAGATTGGTGGGTGT 1920
 QY 2248 AGTTGTCAATGAGAGCCCTCTAACCCATTTCTGTGTTAACTTGTAAAAAATGCTTAC 2307
 Db 1921 AGCTGCCAATGTGGAGCTTCTAATCCCTTTCTGTGCTAACCTGCAGAAAAATGTCTTAC 1980
 QY 2308 CTGTCTGAAATTAAGAAATTTGTAGATTATGAGTAA 2343
 Db 1981 CTGTCTGAAATGCAAGCTTTGTAGATTATGAGTAA 2016

Search completed: April 21, 2004, 07:14:42
 Job time : 1756 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 21, 2004, 05:04:07 ; Search time 315 Seconds

(without alignments)
8858.073 Million cell updates/sec

Title: US-09-555-640-1

Perfect score: 5028
Sequence: 1 gacgcacaggaagaatgacgt.....acgtatcttcctgtgacgac 5028

Scoring table: IDENTITY_NUC
Gapop 10.0, Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :
1: /cgn2_6/prodata/2/ina/5A_COMB.seq.*
2: /cgn2_6/prodata/2/ina/5B_COMB.seq.*
3: /cgn2_6/prodata/2/ina/6A_COMB.seq.*
4: /cgn2_6/prodata/2/ina/6B_COMB.seq.*
5: /cgn2_6/prodata/2/ina/PCTUS_COMB.seq.*
6: /cgn2_6/prodata/2/ina/backfile1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1319.4	26.2	2271	4 US-09-438-268-3	Sequence 3, Appl1
2	146.6	2.9	201	3 US-08-905-124-1	Sequence 1, Appl1
3	107.4	2.1	4680	1 US-08-254-358-1	Sequence 1, Appl1
4	107.4	2.1	4680	1 US-08-475-391-1	Sequence 1, Appl1
5	107.4	2.1	4680	2 US-08-709-609-1	Sequence 1, Appl1
6	107.4	2.1	4680	5 PCT-US95-07178-1	Sequence 1, Appl1
7	107.4	2.1	4910	2 US-08-331-384-2	Sequence 2, Appl1
8	107.4	2.1	4910	2 US-08-836-087-2	Sequence 2, Appl1
9	107.4	2.1	4910	3 US-09-246-320-2	Sequence 2, Appl1
10	107.4	2.1	4910	4 US-09-546-738-2	Sequence 2, Appl1
11	107.4	2.1	7214	4 US-09-438-268-1	Sequence 1, Appl1
12	107.4	2.1	8151	4 US-09-770-315-3	Sequence 3, Appl1
13	107.4	2.1	8151	4 US-09-438-268-2	Sequence 3, Appl1
14	107.4	2.1	8179	4 US-09-438-268-5	Sequence 5, Appl1
15	107.4	2.1	8698	4 US-09-770-315-2	Sequence 2, Appl1
16	98.2	2.0	939	4 US-09-532-594B-12	Sequence 12, Appl1
17	98.2	2.0	1197	4 US-09-532-594B-13	Sequence 13, Appl1
18	98.2	2.0	1611	4 US-09-532-594B-14	Sequence 14, Appl1
19	98.2	2.0	1872	4 US-09-532-594B-3	Sequence 3, Appl1
20	98.2	2.0	1872	4 US-09-532-594B-15	Sequence 15, Appl1
21	98.2	2.0	4767	4 US-09-532-594B-1	Sequence 1, Appl1
22	90.2	1.8	5049	1 US-08-336-345-1	Sequence 1, Appl1
23	90.2	1.8	5049	1 US-08-336-345-2	Sequence 2, Appl1
24	90.2	1.8	5049	2 US-08-647-655-1	Sequence 1, Appl1
25	90.2	1.8	5049	2 US-08-647-655-2	Sequence 2, Appl1
26	86	1.7	225	1 US-07-789-917A-2	Sequence 2, Appl1
27	86	1.7	225	3 US-07-982-193-2	Sequence 2, Appl1

28	60.8	1.2	993	1 US-08-364-081-2	Sequence 2, Appl1
29	60.8	1.2	993	1 US-08-630-552-2	Sequence 2, Appl1
30	60.8	1.2	993	5 PCT-US95-16558-2	Sequence 2, Appl1
31	48.4	1.0	1617	4 US-09-532-594B-19	Sequence 19, Appl1
32	48.4	1.0	1800	4 US-09-532-594B-17	Sequence 17, Appl1
33	48.4	1.0	2208	4 US-09-532-594B-5	Sequence 5, Appl1
34	46	0.9	832	4 US-09-621-976-15639	Sequence 2813, Ap
35	44.4	0.9	505	4 US-09-621-976-15639	Sequence 15639, A
36	44	0.9	11049	4 US-10-204-708-22	Sequence 22, Appl1
37	43.2	0.9	7218	1 US-08-232-463-14	Sequence 14, Appl1
38	43	0.9	399	4 US-09-621-976-8976	Sequence 8976, Ap
39	43	0.9	4185	4 US-09-417-485D-7	Sequence 7, Appl1
40	43	0.9	10640	4 US-09-417-485D-5	Sequence 5, Appl1
41	42.8	0.9	8093	4 US-10-204-708-31	Sequence 31, Appl1
42	42.6	0.8	1664976	4 US-08-916-421B-1	Sequence 1, Appl1
43	42	0.8	1960	3 US-09-177-431-9	Sequence 9, Appl1
44	41.2	0.8	19233	4 US-10-204-708-46	Sequence 46, Appl1
45	41	0.8	640681	4 US-09-790-988-1	Sequence 1, Appl1

ALIGNMENTS

RESULT 1	US-09-438-268-3	Application US/09438268
Sequence 3, Appl1	US-09-438-268-3	Patent No. 6491907
GENERAL INFORMATION:		
APPLICANT: Rabinowitz, Joseph E.		
APPLICANT: Samulevitz, Richard J.		
APPLICANT: Xiao, Weidong		
TITLE OF INVENTION: VIRUS VECTORS AND METHOD OF MAKING AND ADMINISTERING		
TITLE OF INVENTION: THE SAME		
FILE REFERENCE: 5470-186		
CURRENT APPLICATION NUMBER: US/09/438,268		
EARLIER FILING DATE: 1999-11-10		
EARLIER APPLICATION NUMBER: 60/107,840		
EARLIER FILING DATE: 1998-11-10		
EARLIER APPLICATION NUMBER: 60/123,651		
EARLIER FILING DATE: 1999-03-10		
NUMBER OF SEQ ID NOS: 59		
SOFTWARE: Patentin Ver. 2.0		
SEQ ID NO 3		
LENGTH: 2271		
TYPE: DNA		
ORGANISM: Virus		
US-09-438-268-3		
Query Match	26.2%; Score 1319.4; DB 4; Length 2271;	
Best Local Similarity	87.0%; Pred. No. 0;	
Matches 1449; Conservative	0; Mismatches 216; Indels 0; Gaps 0;	
QY	3017 ATGACTTACGTTACTCTGAGAGCCAGACCTGTGACGCGGGAGGTGACCAACCT	3076
DB	607 ATACCTTACGTTACTCTGAGAGCCAGACCTGTGACGCGGGAGGTGACCAACCT	666
QY	3077 ACAAAGCATGTGAGTGAAGGGCTACATTTACTGCTTAATTTCTGAAGTGAATTC	3136
DB	667 GTCAAGATGCTGAGTGAAGGGCTACATTTACTGCTTAATTTCTGAAGTGAATTC	726
QY	3137 TCTAGCAATTTTAAATTCATATGATTCAGACATCATTAATAAGTGTCTCTCAGCA	3196
DB	727 TCCAGCAATTTTAAATTCATATGATTCAGACATCATTAATAAGTGTCTCTCAGCA	786
QY	3197 GCTAGTACGTCACATGCTAGTGAAGAAAGGCAAAAGTGTGCACTAATAGTCCATT	3256
DB	787 GCGAGTACGTCACATGCTAGTGAAGAAAGGTTGTCACATCAAGTCCATA	846
QY	3257 ATGGGTACTCTACTCCGAGATGATCTAGATTTAAAGCTTAATTTGTTTCTCA	3316
DB	847 ATGGGTACTCTCAATCCATGAGATATTTAGATTTAAAGCTTAATTTGTTTCTCA	906
QY	3317 CCATTAGATTTGAGCACTTAATTTAAATTTAGTATAGTCCAGATGCTTTAACT	3376

QY 3667 TTCAATTGAACCTTTGGGTACAGGGGANTGCGCACTATGCTCACAATTTCCAGCTGT 3726
DB 1 TTCTTTTACCTTTTAGTACAGAGGTACAGCATCTATGCTTATTAAGTTTCTCCAGT 60
QY 3727 GCGCCCGAAGAACTAGAGGCTGACGCCAATTTTATGAATGTACAACTCTTTGTA 3786
DB 61 GCGCCCGAAGAACTAGAGGCTGACGTCAACACTTTTATGAATGTACAACTCCCTATA 120
QY 3787 CGGTCTCTTTAGGGTACTTGAACATTTAGAGGGAGCCCTTAATTTTATGATCATTTGAC 3846
DB 121 CGATCCCGGTTCCTGACCATTTAGAGGTGACCCAAATTTATGATCTTTTAC 180
QY 3847 ACAGAGACACGCAATTC 3867
DB 181 ACATGAGACCATGCAATTC 201

RESULT 3

US-08-254-358-1
Sequence 1, Application US/08254358
Patent No. 568785
GENERAL INFORMATION:
APPLICANT: Johnson, Philip R.
TITLE OF INVENTION: Adeno-Associated Virus Materials and
TITLE OF INVENTION: Methods
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 S. Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/254,358
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: No. 568785and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31975
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 474-6300
TELEFAX: (312) 474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 4680 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-254-358-1

Query Match 2.1%; Score 107.4; DB 1; Length 4680;
Best Local Similarity 49.4%; Pred. No. 3.8e-18;
Matches 279; Conservative 0; Mismatches 286; Indels 0; Gaps 0;
QY 1172 AGAGGTTACTGATTAAGAAATTAATAGTAATTAATTTGTGTCAAAATCTATG 1231
DB 1183 AGCCCGTGAGAGCATTTCCAGCATCGAATTTTAATTTTGAACCTAAACGGTACG 1242
QY 1232 ATCCTCTTTAGTGGGCAACATGTGTTAAGTGTGATTCACAAAATGTGTAAATAA 1291
DB 1243 ATCCCAATATGCGGCTTCCTTTCTGGATGCGGCACGAAAAGTTGCGCAAGAGA 1302
QY 1292 ACACCTGTGTGTTTACGGGCAACAGTACTGAAAAAACAATTTGGCAATGGCTATTG 1351

DB 1303 ACACCATCTGGCTGTGTTGGGCTGCAACTACCGGGAAGACCAATCGCGGAGCCATAG 1362
QY 1352 CTAAACCTGACAGATGATGAAATGGAATTTGAATATGAATACTTTCCATTAAATG 1411
DB 1363 CCACACTGTGCTCTTCTACGGGTGCTAACTGACCAATGGAATCTTCCCTCAACG 1422
QY 1412 ATGTACCGGGAAAGATTGTGTGCTGGAGATGAAGCAATTTAATGTCATATTGTG 1471
DB 1423 ACTGTGTCAAGATGTGTATCTGTTGGAGAGGAGGAAGATGACCCGCAAGTGTG 1482
QY 1472 AACCTCAAAAGCATTTTATGATGTGTGTCAGCCAAACAGGTGATGCAAAAATGCTGGCA 1531
DB 1483 AGTCGCCAAAGCATTTCTGAGAGGAAGAGTGTGCGGTGACCAAAATGCAAGTCT 1542
QY 1532 GTGTGCACTGCGCGGTGCTGTGTATTAACCAAGCAATGTGATTAATTTGTTG 1591
DB 1543 CGGCCAGATGAGACCCGATCCGTGTATGTCACTCAACCAACATGTGCGCGTGA 1602
QY 1592 TGAGTGTATACCACTACCAACTGTGATGCTTAAAGCTTAAAGAGATGTTAAGC 1651
DB 1603 TTGACGGAGACTACAGACCTTGAAACACGAGCGCTTGCAAGACCGATTTCAAT 1662
QY 1652 TAAACTTACCATAGATGATGACCTGACATGGGTTTACTTACAGAGCTGATGTAAC 1711
DB 1663 TTGACTCAACCGCGCTGTGATCATGCTTTGGAAAGTCAACCAAGAGAAAGTCAAG 1722
QY 1712 AATGCTTAATGTGTATGACA 1736
DB 1723 ACTTTTCCGTGGGCAAGATCA 1747

RESULT 4

US-08-475-391-1
Sequence 1, Application US/08475391
Patent No. 5786211
GENERAL INFORMATION:
APPLICANT: Johnson, Philip R.
TITLE OF INVENTION: Adeno-Associated Virus Materials and
TITLE OF INVENTION: Methods
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 S. Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/475,391
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA: 08/254,358
ATTORNEY/AGENT INFORMATION:
NAME: No. 5786211and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31975
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 474-6300
TELEFAX: (312) 474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 4680 base pairs
TYPE: nucleic acid
STRANDEDNESS: single

```

Db      1543  CGGCCCGAGTAAAGACCCGACTCCCGTGTATCGTCACTTCGAACACCAACATATGTGCGCCGTGA 1602
QY      1592  TGAAGTGGTAAATACCACTATCAACTGTGATGATGTAAAGCCTTAAAGGAACGGAATGTAAAGC 1651
Db      1603  TTGAACGGGAATCAACGACTCTTGAAACAACAGACGCCGTTGCAAGACGGAGATGTTCAAT 1662
QY      1652  TAAACTTTACCATTAAGATGATGAGCCCTGGAATGGGTTTACTTACAGAGGCTGATGTACAAC 1711
Db      1663  TTGAACGTACACCCGCCCGCTGTGATCATGAATCTTTGGGAAGGTCAACCAAGAGAGATCAAAAG 1722
QY      1712  AATGGCTAACTTGTGTGTAATGCACA 1736
Db      1723  ACTTTTTCGGGTGGGCAAGAGATCA 1747

RESULT 6
PCT-US95-07178-1
; Sequence 1, Application PC/TUS9507178
; GENERAL INFORMATION:
; APPLICANT: Johnson, Philip R.
; TITLE OF INVENTION: Adeno-Associated Virus Materials and
; TITLE OF INVENTION: Methods
; NUMBER OF SEQUENCES: 3
; COMPLEMENTARY SEQUENCES: 3

```


QY 1532 GTGTGGCAGTCCCGGTGCTGCTGTTATACAGCAATGTGACATTATTTGTTG 1591
DB 1294 CGGGCCAGATAGACCCCACTCCCGTATCTCCTCAACACCAACATGTGCCCCGTGA 1235
QY 1592 TGAAGTGAATACCACTACCACTGTGCTAAAGCTTAAAGAAAGAGTGTAAAGC 1651
DB 1234 TTGACGGGAACTCAACGACCTTCAACACCAAGCCGTTGCAAGACCGGATGTTCAAT 1175
QY 1652 TAAACTTACCAATGAATGTAGCCCTGACATGGGTTTACTACAGAGCTGATGTACAC 1711
DB 1174 TTGACTCACCCTCCCTGTGATCATGACTTTGGAAAGTGTACCAACAGAAAGTCAAG 1115
QY 1712 AATGCTAACTTGTGTATGACACA 1736
DB 1114 ACTTTTCCGGTGGCAAGATCA 1090

RESULT 8

US-08-836-087-2/c
Sequence 2, Application US/08836087
Patent No. 5871982
GENERAL INFORMATION:
APPLICANT: Trustee of University of Pennsylvania
APPLICANT: Wilson, James M.
APPLICANT: Kelley, William M.
APPLICANT: Fisher, Krishna J.
TITLE OF INVENTION: Hybrid Adenovirus-AAV Vector and
TITLE OF INVENTION: Methods of Use Thereof
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Howson and Howson
STREET: Spring House Corporate Cntr, PO Box 457
CITY: Spring House
STATE: Pennsylvania
COUNTRY: USA
ZIP: 19477
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/836,087
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/331,384
FILING DATE: 28-OCT-1994
ATTORNEY/AGENT INFORMATION:
NAME: Bak, Mary E.
REGISTRATION NUMBER: 31,215
REFERENCE/DOCKET NUMBER: GNVN.007PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-540-9200
TELEFAX: 215-540-5818
INFORMATION FOR SEQ. ID NO.: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 4910 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
US-08-836-087-2

Query Match 2.1%; Score 107.4; DB 2; Length 4910;
Best Local Similarity 49.4%; Pred. No. 3.9e-18;
Matches 279; Conservative 0; Mismatches 286; Indels 0; Gaps 0;

QY 1172 AGCAGGTTACTTGATTAAGAAATTAATAATTAATTAATTTGTCGCAAACTATG 1231
DB 1654 AGCCCGTGGAGGACATTCACGCAATCGATTTATTAATTTTGAACCTAAACGGGTAG 1595

QY 1232 ATCTCTTTTATAGGGGCAACATGTGTAAAGGATTTGACAAAAATGTGTAAAAA 1291
DB 1594 ATCCCAATATGCGGCTTCCTCTTCTGTGGATGGCCACGAAAAAGTTCCGCAAGAGA 1535
QY 1292 ACACCTGTGTTTATACGGGCGCACCAAGTACTGAAAAAATTTGGCATGGCTATG 1351
DB 1534 ACACATCTGGCTGTGTGGGCGTGCACATACGGGGAAGACCAACATCGGGAGCGCATG 1475
QY 1352 CTAAACTGTACCACTGTATGGAATGTGAATTTGAAATATGAAAATTTCATTATG 1411
DB 1474 CCACACTGTGCTTCTACGGGTGTGTAACCTGACCAATGAACTTCCCTTCAAG 1415
QY 1412 ATGTACGGGGAATAATTTGTGTGCTGGATGAAAGGCTTTATAGTCACTATTTG 1471
DB 1414 ACTGTGTCAACATGTGTGTGTGTGTGAGAGAGGGAAGATGACCGCAAGTGTG 1355
QY 1472 AAGCTCAAAAGCCATTTTATGAGTGTGTCAGCAACAGGATGATGAAATGCGTGA 1531
DB 1354 AGTCGCGCAAGCCATTTCTCGAGAGGAAGAGGTGCGGTGACCAAGAAATGCAAGTCT 1295
QY 1532 GTGTGCACTGCCCGGTGCTGTGTGTATACCAAGCAATGTGACATTATTTGTTG 1591
DB 1294 CGGCCAGATTAACCCGACTCCCGTGTGATCTCACCCTCAACCAACATGTGCGCGTGA 1235
QY 1592 TGAAGTGAATACCACTACCACTGTGCAATGTAAAGCTTAAAGAAAGGATGTAAAGC 1651
DB 1234 TTGACGGGAATCTCAACGACCTTCAACACCAAGACCGCTTGCAGAACCGGATGTCAAT 1175
QY 1652 TAACTTACCAATGAATGTAGCCCTGACATGGGTTTACTTACAGAGCTGATGTACAAC 1711
DB 1174 TTGAATCACCCTCCGCTGTGATCATGACTTTGGAAAGTGTCAACCAAGAGAAATGCAAG 1115
QY 1712 AATGCTAACTTGTGTATGACACA 1736
DB 1114 ACTTTTCCGGTGGCAAGATCA 1090

RESULT 9

US-09-246-320-2/c
Sequence 2, Application US/09246320
Patent No. 6251677
GENERAL INFORMATION:
APPLICANT: Trustee of University of Pennsylvania
APPLICANT: Wilson, James M.
APPLICANT: Kelley, William M.
APPLICANT: Fisher, Krishna J.
TITLE OF INVENTION: Hybrid Adenovirus-AAV Vector and
TITLE OF INVENTION: Methods of Use Thereof
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Howson and Howson
STREET: Spring House Corporate Cntr, PO Box 457
CITY: Spring House
STATE: Pennsylvania
COUNTRY: USA
ZIP: 19477
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/246,320
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/836,087
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bak, Mary E.
REGISTRATION NUMBER: 31,215
REFERENCE/DOCKET NUMBER: GNVN.007PCT
TELECOMMUNICATION INFORMATION:

TELEPHONE: 215-540-9200
TELEFAX: 215-540-5818
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 4910 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: unknown
MOLECULE TYPE: CDNA
US-09-246-320-2

Query Match 2.1%; Score 107.4; DB 3; Length 4910;
Best Local Similarity 49.4%; Pred. No. 3.9e-18;
Matches 279; Conservative 0; Mismatches 286; Indels 0; Gaps 0;

1172 AGCAGTTACTTGATTAAGAAATAAATAGTAATTTATTTGTGTCAAACTATG 1231
1654 AGCCCGTGAAGAGATTTCCAGCAATCGGATTTAAATTTTGAACCTAAACGGGTACG 1595
1232 ATCTCTTTTATGAGGTCACATGTTAAGTGAATGACAAATAATGTGTAAAAA 1291
1594 ATCCCAATATGCGGCTTCCTTTCTGGATGAGCCACAAAATTTCCGCAAGAGA 1355
1292 ACACCTGTGGTTTACGGCCACCAAGTACTGAAAAAATAATTTGGCAATGGCTATTG 1351
1534 ACACCAATCTGGCTGTTGGGCTGCACTACCGGAAAGACCAACATCGCGAGGCCATAG 1475
1352 CTAAACTGTACCAAGTATGGAATGTGAATTTGAATTAAGAACTTTCCATTATG 1411
1474 CCACACTGTGCTCTTCTACGGGTGCGTAACTGGAACCAATGAGAACTTTCCCTTCAACG 1415
1412 ATGAGCGGGGAAAGTTGGTGTCTGGGATGAAGGATTAATTAAGCTATTTG 1471
1414 ACTGTGCGACAGATGTGATCTGTGTGGAGAGAGGAGAAATACCGCCAAAGTCTTG 1355
1472 AAGTGAAGAAAGCCATTTAAGTGTGTCAGCCCAAGCGTATGACAAAAATGCGTGGCA 1531
1354 AGTGGCCAAAGCCATTCTCGAGGAAGCAAGTGGCGGTGGAACAGAAATGCAAGTCT 1295
1532 GTGTGGAGAGCCCGGCTGTGTGTATTAACCAAGATGTGATTAATTTGTTG 1591
1294 CGGCGCAAGTAGACCCGATCTCCGTGATGTCACCTCCACCAACCAATGTGCGCCCTGA 1235
1592 TGAAGTGAATTAACACTACCACTGATGCTAAGGCTTAAGAGAAAGATGTGAAGC 1651
1234 TTGACGGAACTCAACACCTTGAACACCAAGCCGTTGCAAGACCGAATGTTCAAT 1175
1652 TAAACTTTACCAATGAATGAGCCCTGACATGAGTTTACTTACAGAGCTGATTAAC 1711
1174 TTGAATCTCAACCCGCGCTGATCATGACTTTGGGAAGTCAACCAAGCAAGAGTCAAG 1115
1712 AATGCTAATCTTGTTGTTAATGACA 1736
1114 ACTTTTCCGCTGGGCAAGGATCA 1090

RESULT 10
US-09-546-738-2/c
Sequence 2, Application US/09546738
Patent No. 6387368
GENERAL INFORMATION:
APPLICANT: Trustees of University of Pennsylvania
Wilson, James M.
Kelley, William M.
Fisher, Krishna J.
TITLE OF INVENTION: Hybrid Adenovirus-AAV Vector and
Methods of Use Thereof
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Howson and Howson
STREET: Spring House Corporate Cntr, PO Box 457
CITY: Spring House
STATE: Pennsylvania

COUNTRY: USA
ZIP: 19477
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/546,738
FILING DATE: 11-Apr-2000
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/246,320
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bak, Mary E.
REGISTRATION NUMBER: 31,215
REFERENCE/DOCKET NUMBER: GNVPN.007PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-540-9200
TELEFAX: 215-540-5818
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 4910 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: unknown
MOLECULE TYPE: CDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-546-738-2

Query Match 2.1%; Score 107.4; DB 4; Length 4910;
Best Local Similarity 49.4%; Pred. No. 3.9e-18;
Matches 279; Conservative 0; Mismatches 286; Indels 0; Gaps 0;

1172 AGCAGTTACTTGATTAAGAAATAAATAGTAATTTATTTGTGTCAAACTATG 1231
1654 AGCCCGTGAAGAGATTTCCAGCAATCGGATTTAAATTTTGAACCTAAACGGGTACG 1595
1232 ATCTCTTTTATGAGGTCACATGTTAAGTGAATGACAAATAATGTGTAAAAA 1291
1594 ATCCCAATATGCGGCTTCCTTTCTGGATGAGCCACAAAATTTCCGCAAGAGA 1355
1292 ACACCTGTGGTTTACGGCCACCAAGTACTGAAAAAATAATTTGGCAATGGCTATTG 1351
1534 ACACCAATCTGGCTGTTGGGCTGCACTACCGGAAAGACCAACATCGCGAGGCCATAG 1475
1352 CTAAACTGTACCAAGTATGGAATGTGAATTTGAATTAAGAACTTTCCATTATG 1411
1474 CCACACTGTGCTCTTCTACGGGTGCGTAACTGGAACCAATGGAACCTTTCCCTTCAACG 1415
1412 ATGAGCGGGGAAAGTTGGTGTCTGGGATGAAGGATTAATTAAGTCCATTTGTTG 1471
1414 ACTGTGCGACAGATGTGATCTGTGTGGAGAGAGGAGAAAGATGACCGCAAGTGTG 1355
1472 AAGTGAAGAAAGCCATTTAAGTGTGTCAGCCCAAGCGTATGACAAAAATGCGTGGCA 1531
1354 AGTGGCCAAAGCCATTCTCGAGGAAGCAAGTGGCGGTGGAACCAAGTCAAGTCT 1295
1532 GTGTGGAGAGCCCGGCTGTGTGTATTAACCAAGATGTGATTAATTTGTTG 1591
1294 CGGCGCAAGTAGACCCGATCTCCGTGATGTCACCTCCACCAACCAATGTGCGCCCTGA 1235
1592 TGAAGTGAATTAACACTACCACTGATGCTAAGGCTTAAGAGAAAGATGTGAAGC 1651
1234 TTGACGGAACTCAACACCTTGAACACCAAGCCGTTGCAAGACCGAATGTTCAAT 1175
1652 TAAACTTTACCAATGAATGAGCCCTGACATGAGTTTACTTACAGAGCTGATTAAC 1711
1174 TTGAATCTCAACCCGCGCTGATCATGACTTTGGGAAGTCAACCAAGCAAGAGTCAAG 1115
1712 AATGCTAATCTTGTTGTTAATGACA 1736

APPLICANT: Samulek, Richard J
APPLICANT: Xiao, Weidong
TITLE OF INVENTION: VIRUS VECTORS AND METHOD OF MAKING AND ADMINISTERING
TITLE OF INVENTION: THE SAME
FILE REFERENCE: 5470-186
CURRENT APPLICATION NUMBER: US/09/438, 268
EARLIER FILING DATE: 1999-11-10
EARLIER APPLICATION NUMBER: 60/107, 840
EARLIER FILING DATE: 1998-11-10
EARLIER APPLICATION NUMBER: 60/123, 651
EARLIER FILING DATE: 1999-03-10
NUMBER OF SEQ ID NOS: 59
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 8151
TYPE: DNA
ORGANISM: Virus
US-09-438-268-2

Query Match 2.1%; Score 107.4; DB 4; Length 8151;
Best Local Similarity 49.4%; Pred. No. 5.1e-18;
Matches 279; Conservative 0; Mismatches 286; Indels 0; Gaps 0;

1172 AGCAGTTACTTGCATTAAAGAAATATAATAGTAAATATTATGTGTCAAACTATG 1231
1113 AGCCCGTGAGAGACATTTCCAGCATCGAATTTATAAATTTGAACTAAAGGATACG 1172
1232 ATCTCTTTTATGTGGTCAACATGTGTAAAGTGGATTGACAAATAATGTGTAAAAA 1291
1173 ATCCCAATATGCGGCTTCCGTCTTTCTGGATGGGCAACAAAAGTTCGGCAAGAGA 1232
1292 ACACCCGTGGTTTATGCGGCAACAGTACTGAAAAAACAATTTGGCAATGGCTATTG 1351
1233 ACACCATCTGCTTTTGGGCTTCACTACCGGAAAGACCAATGCGGAGGCTATG 1292
1352 CTAAACCTGACACAGTATGATGATGTAATGGAATGAATAAATCTTTCATTATG 1411
1293 CCACACTGTGCTTCTTACGCGGTGCGTAACCTGACCAATGAGAACTTTCCTTCAAG 1352
1412 ATGTAGCGGGGAAAGTTTGTGTCTGGGATGAAAGCATTTATTAAGTCCATTTTGG 1471
1353 ACTGTGCAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1412
1472 AAGCTGAAAGACCATTTTATGATGATGATGATGATGATGATGATGATGATGATGATG 1531
1413 AGTGGCAAAAGCATTTCTGAGAGAAAGAGTGGCGGTGACCAAGAAATGCAAGTCT 1472
1532 GTGTGGAGTCCCGGTGTGTGTGTATTAACCAAGATGATGATGATGATGATGATGATG 1591
1473 CGGCGCAAGATGACCGGATCTCGATGATGATGATGATGATGATGATGATGATGATG 1532
1592 TGAAGTATATCACTACATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1651
1533 TTGACGGAACTAAACACCTTCCAGACCAAGCGGTGCAAGACCGGATGTTCAAT 1592
1652 TAAACTTACATTAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1711
1593 TTGAACTACCCCGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1652
1712 AATGGCTAATCTGTGTATGACA 1736
1653 ACTTTTCCGTTGGCAAGGATCA 1677

RESULT 14
US-09-438-268-5
Sequence 5, Application US/09438268
Patent No. 6491907
GENERAL INFORMATION:
APPLICANT: Rabinowitz, Joseph E.
APPLICANT: Samulek, Richard J
APPLICANT: Xiao, Weidong
TITLE OF INVENTION: VIRUS VECTORS AND METHOD OF MAKING AND ADMINISTERING

TITLE OF INVENTION: THE SAME
FILE REFERENCE: 5470-186
CURRENT APPLICATION NUMBER: US/09/438, 268
CURRENT FILING DATE: 1999-11-10
EARLIER APPLICATION NUMBER: 60/107, 840
EARLIER FILING DATE: 1998-11-10
EARLIER APPLICATION NUMBER: 60/123, 651
EARLIER FILING DATE: 1999-03-10
NUMBER OF SEQ ID NOS: 59
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 5
LENGTH: 8179
TYPE: DNA
ORGANISM: Virus
US-09-438-268-5

Query Match 2.1%; Score 107.4; DB 4; Length 8179;
Best Local Similarity 49.4%; Pred. No. 5.2e-18;
Matches 279; Conservative 0; Mismatches 286; Indels 0; Gaps 0;

1172 AGCAGTTACTTGCATTAAAGAAATATAATAGTAAATATTATGTGTCAAACTATG 1231
1113 AGCCCGTGAGAGACATTTCCAGCATCGAATTTATAAATTTGAACTAAAGGATACG 1172
1232 ATCTCTTTTATGTGGTCAACATGTGTAAAGTGGATTGACAAATAATGTGTAAAAA 1291
1173 ATCCCAATATGCGGCTTCCGTCTTTCTGGATGGGCAACAAAAGTTCGGCAAGAGA 1232
1292 ACACCCGTGGTTTATGCGGCAACAGTACTGAAAAAACAATTTGGCAATGGCTATTG 1351
1233 ACACCATCTGCTTTTGGGCTTCACTACCGGAAAGACCAATGCGGAGGCTATG 1292
1352 CTAAACCTGACACAGTATGATGATGTAATGGAATGAATAAATCTTTCATTATG 1411
1293 CCACACTGTGCTTCTTACGCGGTGCGTAACCTGACCAATGAGAACTTTCCTTCAAG 1352
1412 ATGTAGCGGGGAAAGTTTGTGTCTGGGATGAAAGCATTTATTAAGTCCATTTTGG 1471
1353 ACTGTGCAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1412
1472 AAGCTGAAAGACCATTTTATGATGATGATGATGATGATGATGATGATGATGATGATG 1531
1413 AGTGGCAAAAGCATTTCTGAGAGAAAGAGTGGCGGTGACCAAGAAATGCAAGTCT 1472
1532 GTGTGGAGTCCCGGTGTGTGTGTATTAACCAAGATGATGATGATGATGATGATGATG 1591
1473 CGGCGCAAGATGACCGGATCTCGATGATGATGATGATGATGATGATGATGATGATG 1532
1592 TGAAGTATATCACTACATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1651
1533 TTGACGGAACTAAACACCTTCCAGACCAAGCGGTGCAAGACCGGATGTTCAAT 1592
1652 TAAACTTACATTAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1711
1593 TTGAACTACCCCGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1652
1712 AATGGCTAATCTGTGTATGACA 1736
1653 ACTTTTCCGTTGGCAAGGATCA 1677

RESULT 15
US-09-770-315-2
Sequence 2, Application US/09770315
Patent No. 6429001
GENERAL INFORMATION:
APPLICANT: Chiron Corporation
TITLE OF INVENTION: Recombinant AAV Packaging Systems
FILE REFERENCE: 20263-501
CURRENT APPLICATION NUMBER: US/09/770, 315
CURRENT FILING DATE: 2001-01-26
PRIOR APPLICATION NUMBER: US 60/178, 536
PRIOR FILING DATE: 2000-01-26

; NUMBER OF SEQ ID NOS: 8
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 2
 ; LENGTH: 8698
 ; TYPE: DNA
 ; ORGANISM: Unknown
 ; FEATURE:
 ; OTHER INFORMATION: recombinant DNA
 US-09-770-315-2

Query Match Best Local Similarity 2.1%; Score 107.4; DB 4; Length 8698;
 Matches 279; Conservative 0; Mismatches 286; Indels 0; Gaps 0;

QY	1172	AGCAGGTTACTTCATTAAAGAAATATAATAGTAATAATTATTTATTTGTCTCAAACTATG	1231
DB	1183	AGCCCGTGAGGACATTTCCAGCATCGCATTTATTAATTTTGAACTAAACGGGTACG	1242
QY	1232	ATGCTCTTTAAGTGGGTCAACATGTGTAAAGGTGATGACAAAAAATGTGTAAAAAA	1291
DB	1243	ATCCCAATATGCGGCTTCCGTTCTGTGGATGGCCACGAAAAAGTTCCGCAAGAGGA	1302
QY	1292	ACACCTGTGTTTACGGGCAACCAAGTACGAAAAAATTTGGCAATGCTATTG	1351
DB	1303	ACACCATCTGGCTTTGGGCTTGCACTACCGGAAAGACCAACATCGGAGGCGCATG	1362
QY	1352	CTAAACTGTACAGTGTATGGAATGTGAATTTGAATATGAAATTTCCATTTAATG	1411
DB	1363	CCCACTGTGCTTCTCTACGGGTGCTTAATGACCAATGAAATGAACTTTCCCTTCAAG	1422
QY	1412	ATGTAGCGGGGAAAGTTTGTGTGTCTGGGATGAAAGCATTTATTAAGTCACTAATGTG	1471
DB	1423	ACTGTGTGACAAAGATGTGATCTGTGTGGAGAGGAGGAGATGACCGCCAAAGGTGCG	1482
QY	1472	AAGCTGCAAAAGCCATTTAAGTGTCAAGCAACCAAGGTAGATCAAGAAATGCGTGGCA	1531
DB	1483	AGTCGGCCAAAGCCATTCTCGAGGAAGCAAGGTGCGGTGACCAAAATGCAAGTCTT	1542
QY	1532	GTGTGAGTGCCTGCTGTGTGTATTAACCAAGCATGTGACATTACATTTGTTG	1591
DB	1543	CGGCCCAATAGACCCGACTCCCGTGTGATCTCACTCCAAACCAACATGTGCGCGTGA	1602
QY	1592	TGAGTGTAAATACCACTACAGTGTGATGCTAAAGCCTTAAGGAAGGATGTAAAGC	1651
DB	1603	TTGACGGGAACCTCAACGACCTTGGAACACGACGCGCTTGCAAGACCGGATGTCAAA	1662
QY	1652	TAACTTTACATTAAGATGTAAGCCTTGAATGGGTTTACTTACAGAGGCTGATGTACAAC	1711
DB	1663	TTGAATCTACCCGCGCTGTGATCATCTTTGGGAAGTCAACCAAGCAGGAAGTCAAG	1722
QY	1712	AATGCTAACTTGTGTATATGACA	1736
DB	1723	ACTTTTCCGCTGGCAAGATCA	1747

Search completed: April 21, 2004, 15:49:40
 Job time : 322 secs

Db	2341	TTCAAAATTTAAAGATCATTTATATATTTCTTTAGATATCCCTAGAAAAACCATCT	2400
Qy	2508	CTTATATTTGACTTAGTTCCTGCATTAATAAGTAATCTTAAAACTTCACACCTATATA	2567
Db	2401	CTTTGTTGACTTAGTTCCTGCATTAATAATAACCTTAAAACTTCACACCTATATA	2460
Qy	2568	GTCATCATTTTCAGAGCCATGACAGTTATCTGACACCCCATGCTTATCATCCAGTA	2627
Db	2461	GTCATCATTTTCAGAGCCATGACAGTTATCTGACACCCCATGCTTATCATCCAGTA	2520
Qy	2628	AACAGTAGCGAAACCTAGAGAGAAAAATGACAGTTATCTAGTAGAGACTTACACAGC	2687
Db	2521	GCAGTGATCGAAACCTAGAGAGAAAGATGCGATTTATCTAGTAGAACAATTACACAGC	2580
Qy	2688	CTGGGCAAGTTAGCAATCAATTAACCCGGTACTATGTTGGGCTGGCAATGAGCTAC	2747
Db	2581	CTGGGCAAGTTAGGCTTACACTACCCGGTACTATGTTGGGCTGGCAATGAGCTAC	2640
Qy	2748	AACTGGGCTCCCGCAGATGCTGTGACAGTGTCTGCAGAGATTCATGACTTTAGTATA	2807
Db	2641	AAAGCTGGGCCCCCGCAAGTGTCTGTGACAGTGTCTGCAGAGATTCATGACTTTAGTATA	2700
Qy	2808	GCCAAATGGCTAAGTTGGGAATTAATCTTATACACATTTGACCGGTGCACATAGAAAT	2867
Db	2701	GCCAACTGGCTAAGTTGGGAATTAATCAATATCTCATTTGACGTGACATAGAAAGC	2760
Qy	2868	TGTTAAAAATATATAAAATATGMAACAGGGTTTCAAGCACAAGCAGTAAAGATTACTTTA	2927
Db	2761	TTTTTAAAAATATATAAAATATGMAACTGGGTTTCAAGCACAAGTATAAAGACTTTTA	2820
Qy	2928	CTTTAAAAAGTGCAGCTGCCCTCTGTGCCCATTTTCAAGAAGTTTACCGGAAGTCCCG	2987
Db	2821	CTTTAAAAAGTGCAGCTGCCCTCTGTGCCCATTTTCAAGAAGTTTCCGGAAGTCCCG	2880
Qy	2988	CGTACAAAGCTCTCAGAAAAATATCCCGACATGACTTCAGTTTATCTCGCANAACCGACA	3047
Db	2881	CTTACAAAGCTCTCAGAAAAATATCCCGACATGACTTCAGTTTATCTCGCANAACCGACA	2940
Qy	3048	CTGGTGCAGGGGGGAGTAGCAACCTTACAAAAAGCATGTGAGTGAAGGGCTACAT	3107
Db	2941	CTGGTGCAGGAGGGGGGAGTAGAATCTGTGMAAAGCATGTGAGTGAAGGGGCACTT	3000
Qy	3108	TTACTGCTAATTTCTGTAAAGTGTACATTTCTAGGCAATTTTATATTCATATGATCCAG	3167
Db	3001	TTAGTGCCAACTGTGTACTGTGTACATTTTCAAGCAATTTTATTCATATGATCCAG	3060
Qy	3168	AGCATCATTAATAAGTGTCTCTCAGACGTAAGTGTGCCACATGCTTAGTGGAAAG	3227
Db	3061	AGCACCATTAATAAGTGTGTCTCTCCCGCAGAAAGTGTGCCACATGCCAGTGGAAAG	3120
Qy	3228	AGGCAAAAGTGTGCACTATATGTGCCATTAATGGGGTACTCTACTCCGGAGATACCTAG	3287
Db	3121	AGGCAAAAGTGTGCACTATATGTGCCATTAATGGGGTACTCTAACCCCATGAGATATTAG	3180
Qy	3288	ATTTTAAATGCTTTAAATTTGTTTTCTCACAATTAGAGTTTCAGACCTTAATGAAATTT	3347
Db	3181	ATTTTAAATGCTTTAAATTTATTTTTTCAACCTTAGAGTTTCAGACCTTAATGAAATTT	3240
Qy	3348	ATGCTAGTATAGCTCCAGATGCTTTAATCTGTACTATTTTCAGAAATGCTGTAAAGATG	3407
Db	3241	ATGCAAGATATAGCTCTGATGCTTTAATCTGTAAACCATATCAGAAATGCTGTAAAGATG	3300
Qy	3408	TCACAGACAAAAACGAGAGAGGTGTGCAGTTACAGACAGACACAGAGAGTTTGTGTA	3467
Db	3301	TTACCGACAAATCTGAGAGGGGGGTGCAGGTTACTGACAGCATCTACAGAGGCTTATGCA	3360
Qy	3468	TGTTAGTGCATGATGATATAATACCATATGTGCTAGTGCAGGGAACAAGACACTAG	3527
Db	3361	TGTTAGTGCATGATGATATAATAGTACCATATGTGTTAGGGGCAAGGTCAAGATACTTAG	3420
Qy	3528	CTCCAGAACTGCCATTTGGGTTTACTTTTCCCCCAGATATGCTTAAACAAGTAGTG	3587

D	b	3421	CCCCAAGACCTTCGATTTGGGTATACCTTTCOCCTCAATACGTTACTTAAACAGTAGAG	3480
O	y	3388	AAGTAAACACACAGAAATTTCAAGAGACACGCAAAAAATTGGCTATGTAAGATACGCTT	3647
D	b	3481	ATGTTAAACACACAGAAATTTCTTGAGACACGCAAAAAATTGGCAAGTAAGAAATCAGAT	3540
O	y	3648	TTTATGTATGACACAGATTCATTGAACTTTTGGTACAGGGGGATCTGCCATATGT	3707
D	b	3541	TTTATGTATGGAACACAGATTCCTTTTACGCTTTTATGATACAGAGGTACAGCAACTATGT	3600
O	y	3708	CCATCAAAATTTCCAGCTGTGGCCCCAGAAAACTAGAAAGGCTGACGCAACTTTTATG	3767
D	b	3601	CTTATTAAGTTTCCCTCCAGTGGCCCCAGAAAAATTAGAGGCTGACATCAACTTTATG	3666
O	y	3768	AAATGTACAAACCCCTTATATAGGAATCCCGCTTAGGGGTTCTCTGACACTTAGAGAGTGC	3720
D	b	3828	CTAAATTTATGATCATTTGACACACGAAACACGCAATTCAGCCCAAAACTTTATATGCTG	3887
O	y	3721	CAAAATTTATGATCTTTTAAACATATMAACACATGCAATTCAGCCCCCAAACTTCATGCTCAG	3780
D	b	3888	GGCCACTAATTAATTCAGTGTCTACCAAGAAAGAGACAATTCATATACAGGTCTGGAA	3947
O	y	3781	GGCCACTAATTAATTCAGTGTCTACCAAGAAAGAGACAAGTCTATGATCTGAGACTGAA	3840
D	b	3948	AAGCCCTTACGGGGCTTATGATCTGGCACTAGCCAAAAACCCAGATTTCCCTACGCCCG	4007
O	y	3841	AAGCTTATACAGGCTTATAGCACAGGTACCTCTCAAAAACATAGAAATTCCTTAGCCCTG	3900
D	b	4008	GGCCAGTATCTCAGCCATACCATATCTGGGACATGATTAATATGTTACAGAAATTAATG	4067
O	y	3901	GGCCAGTATCTCAGCCATACCATATCTGGGACACAGATTAATATGTTACAGAAATTAATG	3960
D	b	4068	CCATTTACATAGCAAAACACTTATGGAATGCTGAGCAAGAGATCAGCAAGGGG	4127
O	y	3961	CCATTTCTCATGTGACAGCACTTATGTTACGTTGAGACAAAGATATACAGAAAGAG	4020
D	b	4128	TAGGAAGATTTCCAAATGAAAAAGAACAGCTTATAGCAATGATCTTATACATGACA	4187
O	y	4021	TGGGTATGATTTCCAAATGAAAAAGAACAGCTTATAGCAATGATCTTATACATGACA	4080
D	b	4188	CATATCTTCCTAATTAAGGAACCCACATATACAGACCAATTTGAACGCTCTTATG	4247
O	y	4081	CCATCTTTCCTCAATTAAGGAACCCACAGATAATACAGATCAATTTGACGCGCCCTTATG	4140
D	b	4248	TGGGCTCGTTTGGAAACAGAGAGCTCTTACATATGAAAGTCAGCTGAGAGTAAATTC	4307
O	y	4141	TGGGTCTCTATGGAACAGAGAGCCCTTCACTATGAAAGCACTGTGTGATTAATTC	4200
D	b	4308	CTAATCTTATGATGACAGTTTAAAACTCAATTTTTCAGGCTTACAGGCGGTGGGTTTGCATC	4367
O	y	4201	CAATTTTATGATGACAGTTTAAAACTCAATTTTTCAGGCTTATAGAGATGGGTTTGCATC	4266
D	b	4368	AACCAACCCCTCAAAATATTTTAAAAATCTACACAAAGTGGCCCAATTTGAGATTA	4427
O	y	4261	AGCACCTCCCTCAAAATATTTTAAAAATCTACACAAAGTGGCCCAATTTGAGATTA	4320
D	b	4428	AATCCATGGAATTAATCTATCTTATGTTCAATATGCTGAGGAATATATACAGTTACATGA	4487
O	y	4321	AATCAATGGAATTAATCTATCTTATGTTCAATATGCTGAGGAATATATACAGTTACATGA	4380
D	b	4488	CCCTTAAATTTGGAGCTCGAAAAGGCTCTAGGAAGTGGAAATCCCGACGCTGGCTTATTC	4547
O	y	4381	CATTTAAATTTGGAGCTCGAAAAGGCTCGGAAGTGGAAATCCCGACGCTGGAGTATTC	4440
D	b	4548	CTCTCATGACGTGTGCTATTTACCATATGTACTGTATGACCCCAACGCTACAGATGCA	4607
O	y	4441	CCCCGACAGCAGCAGTGCATTTACCATATGTACTGTATGACCCCAACGCTACAGATGCA	4500
D	b	4608	AGCAACACACACAGACAGGATATGAAAAGCTGAGAAATTTGTGACATGCAAAAAGCCGTG	4667
O	y	4501	AACCAACACACACAGATGATATGAAAAGCTGAGAAATTTGTGACAGCCCAAAAAGCCGTG	4560

```

RESULT 2
US-10-187-253A-23
/ Sequence 23, Application US/10187253A
/ Publication No. US20030170612A1
/ GENERAL INFORMATION:
/ APPLICANT: Pichanates, Sergio
/ APPLICANT: Shyamala, Venkateshna
/ TITLE OF INVENTION: DIAGNOSTIC ASSAYS FOR PARVOVIRUS B19
/ FILE REFERENCE: CHIR-17194/03US / PP17194.004
/ CURRENT APPLICATION NUMBER: US/10/187,253A
/ CURRENT FILING DATE: 2003-03-10
/ NUMBER OF SEQ ID NOS: 92
/ SOFTWARE: Patentin Ver. 2.0
/ SEQ ID NO 23
/ LENGTH: 4678
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: 4.7 kbp PCR fragment
US-10-187-253A-23

```

Query Match	Best Local Similarity	Score	DB	Length
Matches 4026; Conservative	96.28;	3626;	15;	4678;
	0;	0;		
	0;	635;	Indels	9;
			Gaps	1;
QY	117	CCGCGCTTATGCAAAATGAGCGGCATGTTTAATGTTATTTTAAATTTAATTTGACAAC	176	
DB	1	CCGCGCTTATGCAAAATGAGCGGCATGTTTAATGTTTAATTTAATTTAATTTGACAGT	60	
QY	177	GCCAAACGGTACTAGGGCGGAGTTACGGGGCGTATATAAGACAGCTCG-----T	227	
DB	61	TTGTAAACGTTAAATAGGCGGAGGATAGGCAAGACATCAAGTATATATAGACAGACT	120	
QY	228	TCCCTGACATTTCTTTTCTGTTGCTTTTGACTGGAACTCACTGCTGTTCTTTGCTG	287	
DB	121	GCGGAGCTCTTTCTTTCTGCGGCTCTTTTCTCGGACTTACTCTGCTGTTTTTGTGAG	180	
QY	288	CTAAGTAAGGATTTATATCTAATTTTAAATTTACTAATGAGAGCTATTTGGGGGT	347	
DB	181	CTAATTAACAGGATTTTATCTACTGTTTAACTATTAACATGAGAGTATTTAGAGGGT	240	
QY	348	CTTGACATTTCCCTTAACATTTCTGAGCTGGCTAAGATTAATCTGGTGTCTATGCT	407	
DB	241	GCTTCAATTTCTTCTAATGTTCTTGAGCTGTCTAAGATTAACGATTAATCTGGTGTCTTACT	300	
QY	408	AGACTTAATCTCTTGACTGGGAAACCACTAATCCATTTTAAAGATTAATGGCAATTA	467	
DB	301	GGATTTAATCACTTCTAGCTGGGAAACCACTAATCAATTAACAGACTAATGGCAATTA	360	
QY	468	TTTAAGCAGTGTGCTCTTAACTTGATTTTAACTGGGGCGCGCTAGCAGGTGGCTTATA	527	
DB	361	CTTAAGCAGTGTGCTCTTAACTTGATTTTAACTGGGGCGCGCAATGAGAGGGTGGCTTATA	420	
QY	528	CTTTTTCAGTGGATTTTAACTAATTTGAGGAAGCTATCATATCATATGATTTATTTGG	587	
DB	421	CTTTTTCAGTGGATTTTAACTAATTTGAGGAAGCTATCATATCATATGATTTATTTGG	480	
QY	588	TGCTCCAGCATTAATGCTAAGAACTTAACTGTGCGCTGAGAGGTTATTTAATATGT	647	
DB	481	GGGGCCAGGGTTAAACCCAGAACTCAAGCTGTGTATGAGGGGTTATTTAATATGT	540	
QY	648	TCCTTACATCTTGTAAGTAAAGTAACTTAAATTTTGGCAGGAGTACTACAA	707	

Db 541 ACTTTATCCCTTGTAATCGAAANTCGAAGCTAAATTTTTCGCGAGAAATGACTTCATAA 6000
QY 708 AGGAAAATATTTTATGAGATGAGAGAGAGTTATAGAAAATTTACTTTATGAAAAAATTC 767
Db 601 AGGCAATATCTTAGATAGAGAGACGCTTTATATGAAAAATCTATTTATGAAAAAATACC 660
QY 768 TTTAAATGTTGGTGTGTGTGTGTAACAATTTGACGGGTATATAGACACTGTATTTCCG 827
Db 661 TTTTAATGTTGTATGGTGTGTGTACTTAATTTGACATATATGATATCTGTATTTCTCG 720
QY 828 CTCCTTTTGGGAGAGAGCTTGTCATGCTTAAAGACCCCGCATTTACTGCAAAATACAGAC 887
Db 721 TACTTTTAAAGAGGAGGCTTGCAATCGCAAGAAACCCCGATACACAGCACTAAATGA 780
QY 888 TGTCTATATGAAATCTGGGAGCTTACCTGTGAGAGGGAGATGTTGTGCATTTGGCTGG 947
Db 781 TACTGTACTGTATGTGGGAGCTTACGGGACAGGGGAGAGGTTGTCCATTTAAAG 840
QY 948 AAAGGAAACAAAGCGGGGTTAAAGTTTCAACCAATGTAAATTTGCTATGTGAAACAG 1007
Db 841 GAAAGGAACTAAGGCTAGCATTAAGTTTCAACCTATATGTAACTGGTGTGTGAAAAACAG 900
QY 1008 AGTATTTCTGTAAGATTAATGAAATTAAGTGAATTTTAAACAAATATCTTATTAAGTAG 1067
Db 901 AGTGTTTACGAGAGATTAAGTGAATTAAGTGAATTTTAAACAAATATCTTATTAAGTAG 1067
QY 1068 CAGTCAAGTGGCAGCTTTCAATTCAAAGTGCCTTAAAGTTAGCTATTTATTAAGCTAC 1127
Db 961 TAGTCAAGTGGAGGTTTCAATTCAAAGTGCCTTAAAGTTAGCTATTTATTAAGCTAC 1020
QY 1128 TAACTTGTATCCCACTAGTACATTTCTGTATCATTCAGACTTTAGCAGGTTACTTGCAAT 1187
Db 1021 TAACTTGTATCCCACTAGTACATTTCTGTATCATTCAGACTTTAGCAGGTTACTTGCAAT 1080
QY 1188 TAAAGAAATTAATAATGTAAATTTATTTATGTGTCAAAACATATGATCTCTTTTATGTGG 1247
Db 1081 TAAAGCAATTAATAATGTAAATTTATTTATGTGTCAAAACATATGATCTCTTTTATGTGG 1140
QY 1248 TCACAAATGTATTAAGTGTATGACAAATAATGTGTAAATAAAACACCTGTGTGTTTA 1307
Db 1141 GCAGCAATGTATTAAGTGTATGATTAATAATAATGTGTGCAATAAACAATGTGTGTTTA 1200
QY 1308 CGGGCCACCAACTACTGGAATAAAACAATTTTGGCAATGGCTATTTGCTAAACTGTACAGT 1367
Db 1201 TGGACCGCCAAAGTACAGGGAATAAACAATTTGCGCAATGGCTATTTGCTAAACTGTACAGT 1260
QY 1368 GTATGGAATGTGGAATTTGGAATTAAGAAACCTTTCATTTAATGATGTAGCGGGAAAG 1427
Db 1261 AATATGCAATGTATTAAGTGAATTAAGAAACCTTTCATTTAATGATGTAGCGGGAAAG 1320
QY 1428 TTTGTGTGTGGGATTAAGCAATTTAATGTCACATTTGTGGAAGCTGCAAAAGCCAT 1487
Db 1321 CTGTGTGTGTGGGATTAAGCAATTTAATGTCACATTTGTGGAAGCTGCAAAAGCCAT 1380
QY 1488 TTTTGTGTGTGAGCAACCGGGGTAGATCAAAAAATGCGTGGCAGTGTGCGAGCGCCGG 1547
Db 1381 TTTTGTGTGTGAGCAACCGGGGTAGATCAAAAAATGCGTGGCAGTGTGCGAGCGCCGG 1440
QY 1548 TGTGTGTGTGTATTAACGAAATGTGGAACATTAATTTGTGTGTGTATTAACAC 1607
Db 1441 AGTACCGGTGTATTAACGAAATGTGGAACATTAATTTGTGTGTGTATTAACAC 1500
QY 1608 TACAACTGTGCAATGCAAAAGCTTTAAAGAAACGATGTAAAGCTTAACTTACATTAAG 1667
Db 1501 AATCACTGTATGCAATGCAAAAGCTTTAAAGAAACGATGTAAAGCTTAACTTACATTAAG 1560
QY 1668 ATGTACCCCTGATGAGGTTACTTAAAGAGGCTGATGTAACAATGTGCTAATCTTGTG 1727
Db 1561 ATGTACCCCTGATGAGGTTACTTAAAGAGGCTGATGTAACAATGTGCTAATCTTGTG 1620
QY 1728 TATATGACAAAGCTGAGCCATATGAAAACTGGGCAATTAATCACTTGAATTTGCC 1787

Db 1621 TAATGACAAAGCTGGGACCACTATGAAAACTGGGCAATAAATACTACTTTGATTTCCC 1680
Qy 1788 TGGAAATTAATGCGATGTCCTTCCACCCAGATCTTCCAAACCAACCCCACTTGTCCAGAC 1847
Db 1681 TGGAAATTAATGCGATGTCCTTCCACCCAGATCTTCCAAACCAACCCCACTTGTCCAGAC 1740
Qy 1848 CAGTATCAGCAGAGTGTGTGTAAGCTCTGAAAGAACTGAGTGAAGAGAGCTTTTCA 1907
Db 1741 CAGTATCAGCAGAGTGTGTGTAAGCTCTGAAAGAACTGAGTGAAGAGAGCTTTTCA 1800
Qy 1908 CCTCATCTCCAGCGCTGGAACAGTGAACCCCGCGCTTAAAGCCCGCTCCCG 1967
Db 1801 CCTCATCTCCAGCGCTGGAACAGTGAACCCCGCGCTTAAAGCCCGCTCCCG 1860
Qy 1968 GACCACTTCAGAGAAATCAATTTGTGCGAAGCCAGTTTCTCCGAAGTGTAGCCGCTC 2027
Db 1861 GACCACTTCAGAGAAATCAATTTGTGCGAAGCCAGTTTCTCCGAAGTGTAGCCGCTC 1920
Qy 2028 GTGGAGAGAGCTTTTAAACAGCGCTTGCAGATCAGTTTCTGGAACCTGTAAGAGGCT 2087
Db 1921 GTGGAGAGAGCTTTTAAACAGCGCTTGCAGATCAGTTTCTGGAACCTGTAAGAGGCT 1980
Qy 2088 TGAATTTGTAAGGATGTGTGAGGGGATTCCTGTTGCTGTGTGGAACATAATAA 2147
Db 1981 TGAATTTGTAAGGATGTGTGAGGGGATTCCTGTTGCTGTGTGGAACATAATAA 2040
Qy 2148 CAGTGGGAGAGGCTTGGGCTTGGCTCAATGTAATATGTGAGAGCTTGTATATGG 2207
Db 2041 TACGTGGGAGAGGCTTGGGCTTGGCTCAATGTAATATGTGAGAGGCTTGTATATGG 2100
Qy 2208 ATGGAATTTAGAGATTTAATCTCAGACTAGTGCCTGAGCTTGTATGAGAGGCTC 2267
Db 2101 ATGGAATTTAGAGATTTAATCTCAGACTAGTGCCTGAGCTTGTATGAGAGGCTC 2160
Qy 2268 TAAACCAATTTCTGTGTTAACTTGTAAAAATGTCTTAACTGTCTGATTAACAAGTTT 2327
Db 2161 TAAATCCCTTTCTGTGTTAACTTGTAAAAATGTCTTAACTGTCTGATTAACAAGTTT 2220
Qy 2328 TGTAGATTTAGATTAACCACTAACAAATGTGTGGGAAAGAGTGAACAAATTTGCCAGG 2387
Db 2221 TGTAGATTTAGATTAACCACTAACAAATGTGTGGGAAAGAGTGAACAAATTTGCCAGG 2280
Qy 2388 ACGGTATAGAGCTTTGTGCAATTTATGAAAAAGCTACAGCAAGCTTGAAGCTTA 2447
Db 2281 CTGTGTATCGCAATTTGTGCAATTTATGAAAAAGCTTACAGCAAGCTTGAAGCTTA 2340
Qy 2448 TTCAAAATTTTAAAGACCACTTAACAATTTCTTGAATAATCTTTAGAAAAACCCCTCT 2507
Db 2341 TTCAAAATTTTAAAGACCACTTAACAATTTCTTGAATAATCTTTAGAAAAACCCCTCT 2400
Qy 2508 CTTTATTTGACTTATGTTGCTGCACTTAATAAGTAACTTTAAACTCTCCAGACCTATATA 2567
Db 2401 CTTTATTTGACTTATGTTGCTGCACTTAATAAGTAACTTTAAACTCTCCAGACCTATATA 2460
Qy 2568 GTCATCATTTTCAAGGCAATGAGCAGTTATCTGACCAACCCCAAGCTTATCATCCAGTA 2627
Db 2461 GTCATCATTTTCAAGGCAATGAGCAGTTATCTGACCAACCCCAAGCTTATCATCCAGTA 2520
Qy 2628 ACAGTATGAGAACTTGAAGAGAAATGAGATATCTAGTGAAGACTTACACAAGC 2687
Db 2521 GCAATCATGAGAACTTGAAGAGAAATGAGATATCTAGTGAAGACTTACACAAGC 2580
Qy 2688 CTGGGCAAGTTAGATTAATTAACCCGCTACTAACTATGTTGGGCTGGCAATGAGCTAC 2747
Db 2581 CTGGGCAAGTTAGATTAATTAACCCGCTACTAACTATGTTGGGCTGGCAATGAGCTAC 2640
Qy 2748 AAGCTGGGCTTCGCAAGATGCTGTGACAGTGTGCAAGGATTCATGACTTTAGGTATA 2807
Db 2641 AAGCTGGGCTTCGCAAGATGCTGTGACAGTGTGCAAGGATTCATGACTTTAGGTATA 2700
Qy 2808 GCCAATTTGAGTATGTTGGGAAATAATCTTATACAAATTTGACAGGTGACAGATGAAGAT 2867
Db 2701 GCCAATTTGAGTATGTTGGGAAATAATCTTATACAAATTTGACAGGTGACAGATGAAGAT 2760

Qy 2868 TGTAAAAATATAAAAATGAAACAGGGTTTCAGACACAGAGTAAAGATTAATTTA 2927
Db 2761 TTTTAAAAATATAAAAATGAAACAGGGTTTCAGACACAGAGTAAAGATTAATTTA 2820
Qy 2928 CTTTAAAGGTGAGCTGCCCCCTGTGGCCCAATTTTCAAGGAAGTTTACCAGAGTGC 2987
Db 2821 CTTTAAAGGTGAGCTGCCCCCTGTGGCCCAATTTTCAAGGAAGTTTACCAGAGTGC 2880
Qy 2988 GGTACAAAGCTTCAGAAAAATATCCCAAGATGATCTTCAAGTAACTCTGCAAGGCCAGCA 3047
Db 2881 CTTTAAAGGTGAGCTGCCCCCTGTGGCCCAATTTTCAAGGAAGTTTACCAGAGTGC 2940
Qy 3048 CTGGTCAAGCGGGGAGGTGAGCAACCTTACAAAAAGCATGTGAGTGAAGGGGCTCAT 3107
Db 2941 CTGGTCAAGCGGGGAGGTGAGCAACCTTACAAAAAGCATGTGAGTGAAGGGGCTCAT 3000
Qy 3108 TTACTGTAAATCTGTACAGTGTACATTTCTTGAAGCAATTTTAAATTCATATGATCCAG 3167
Db 3001 TTACTGTAAATCTGTACAGTGTACATTTCTTGAAGCAATTTTAAATTCATATGATCCAG 3060
Qy 3168 AGCATCATTAATAAGTGTCTCTCCAGAGCTTATGATGCTCCCAATGCTAGTGGAAAG 3227
Db 3061 AGCATCATTAATAAGTGTGTCTCTCCAGAGCTTATGATGCTCCCAATGCTAGTGGAAAG 3120
Qy 3228 AGGCAAAAGTGTGCACTTATGATGCTTATGAGGATATCTACTCGGTGAGATPACTAG 3287
Db 3121 AGGCAAAAGTGTGCACTTATGATGCTTATGAGGATATCTACTCGGTGAGATPACTAG 3180
Qy 3288 ATTTATATGCTTAAATTTGTTTCTTCAACATTAAGTTTACAGCTTAATTTGAATTT 3347
Db 3181 ATTTATATGCTTAAATTTGTTTCTTCAACATTAAGTTTACAGCTTAATTTGAATTT 3240
Qy 3348 ATGATGATATGCTGCAATGCTTAACTGTAACTTATTCAGAAATTTGCTGTAAAGATG 3407
Db 3241 ATGATGATATGCTGCAATGCTTAACTGTAACTTATTCAGAAATTTGCTGTAAAGATG 3300
Qy 3408 TCACAGCAAAAAGAGAGAGTGTGCAAGTTTCTGACAGCAACACAGAGCGTTGTGTA 3467
Db 3301 TCACAGCAAAAAGAGAGAGTGTGCAAGTTTCTGACAGCAACACAGAGCGTTGTGTA 3360
Qy 3468 TGTATGATGATGATGATTAATAATCCATATGTGTAGGTCAAGGCAAGACACTAG 3527
Db 3361 TGTATGATGATGATGATTAATAATCCATATGTGTAGGTCAAGGCAAGACACTAG 3420
Qy 3528 CTCAGAACTGCCAATTTGGGTTTACTTTCCCCCAATGCTTACTTAACAGTATGAG 3587
Db 3421 CCCAGAACTGCCAATTTGGGTTTACTTTCCCCCAATGCTTACTTAACAGTATGAG 3480
Qy 3588 AAGTAAACACAGAAATTTCAAGAGACAGCAAAAAATTTGGCTAGTGAAGATCAGCTT 3647
Db 3481 AAGTAAACACAGAAATTTCAAGAGACAGCAAAAAATTTGGCTAGTGAAGATCAGCTT 3540
Qy 3648 TTTATGTTTGAAGACAGATTTCAATTTGAATTTTGGGTAACAGGGGAGTGCACATATG 3707
Db 3541 TTTATGTTTGAAGACAGATTTCAATTTGAATTTTGGGTAACAGGGGAGTGCACATATG 3600
Qy 3708 CTTAATAATTTCCAGCTGTGCCCCCAGAAAACTTGAAGGCTGACGCAATTTTATG 3767
Db 3601 CTTAATAATTTCCAGCTGTGCCCCCAGAAAACTTGAAGGCTGACGCAATTTTATG 3660
Qy 3768 AAATGTACAACTTTGTATGAGTGTCTGTTAGGGGTACCTGACACATTTAGAGGGAGC 3827
Db 3661 AAATGTACAACTTTGTATGAGTGTCTGTTAGGGGTACCTGACACATTTAGAGGGAGC 3720
Qy 3828 CTAATTTAGATCATTTGACACAGAAAGCAGCAATTTGAGCCCAAACTTTATGCTG 3887
Db 3721 CAAATTTAGATCATTTGACACAGAAAGCAGCAATTTGAGCCCAAACTTTATGCTG 3780
Qy 3888 GGCACATTAATAATGATGCTTACCAAAAGAGAGCAATTTTATACAGGTGCTGGA 3947
Db 3781 GGCACATTAATAATGATGCTTACCAAAAGAGAGCAAGCTTATGATGAGCTGGA 3840

```

QY 3948 AAGCCCTTAAGGGCTTACTGACCTAGCCAAAACAGAAATTTCCCTAGCCCG 4007
DB 3841 AAGCCTTAACAGGCTTACGACAGGACTCTCAAAACATGAAATCTTACGCCCTG 3900
QY 4008 GGCACGATCTACGACATACCTACCTGGGACACTGATTAATATGTTACGAAATTAATG 4067
DB 3901 GGCACGATCTACGACATACCTACCTGGGACACTGATTAATATGTTACGAAATTAATG 3960
QY 4068 CCATTTCACATGACAAACCACTTATGAAATGCTGAGGACAAAGATATACGAAAGG 4127
DB 3961 CCATTTCACATGACAAACCACTTATGAAATGCTGAGGACAAAGATATACGAAAGG 4020
QY 4128 TAGAAGATTTCCAAATGAAAAAGACAGCTTAAGAGCTTAAGCTTAATGACACA 4187
DB 4021 TGGGTAGATTTCCAAATGAAAAAGACAGCTTAAGAGCTTAAGCTTAATGACACA 4080
QY 4188 CATACCTCCCTAATTAAGGAAACCAATATACAGACCAAAATTAAGCCCTCTTAATG 4247
DB 4081 CCTACTTCCCAATTAAGGAAACCAATATACAGACCAAAATTAAGCCCTCTTAATG 4140
QY 4248 TGGGCTCTGTTGGAACAGAAAGCTCTTCACTATGAAAGTCAAGCTGAGATTAATTC 4307
DB 4141 TGGGCTCTGTTGGAACAGAAAGCTCTTCACTATGAAAGTCAAGCTGAGATTAATTC 4200
QY 4308 CTAACTTAAGTACAGTTTAAATCAATTTGACGCTTACGCGGCTGAGGTTTGATC 4367
DB 4201 CAATTTAGTACAGTTTAAATCAATTTGACGCTTACGCGGCTGAGGTTTGATC 4260
QY 4368 AACCAACCCCTCAATATTTTAAATATCTACCAAAAGTGGGCAATTTGAGGTTTA 4427
DB 4261 AGCACCTCCTCAATATTTTAAATATCTACCAAAAGTGGGCAATTTGAGGTTTA 4320
QY 4428 AATCAATGGAATTTACTTATTTAGTTCAATATGCTGAGGAAATATGACAGTTACATGA 4487
DB 4321 AATCAATGGAATTTACTTATTTAGTTCAATATGCTGAGGAAATATGACAGTTACATGA 4380
QY 4488 CCTTAAATGGAACCTTCGAAAGCTACGAAAGTGGAAATCCCAAGCTGAGGTTATC 4547
DB 4381 CAATTTAAATGGAAGCCCGTAAAGCTACGAAAGTGGAAATCCCAAGCTGAGGTTATC 4440
QY 4548 CTCCTCATGAGCTGCTCAATTAATGATGATGATGATGATGATGATGATGATGATG 4607
DB 4441 CCCCCGACGACAGGATCAATTAATGATGATGATGATGATGATGATGATGATGATG 4500
QY 4608 AGCAACACACAGACACGATATGAAAAAGCTGAAAGATTTGGAATGCAAAAGCCGTG 4667
DB 4501 AACAAACACACAGACATGATATGAAAAAGCTGAAAGATTTGGAATGCAAAAGCCGTG 4560
QY 4668 TGACACCATTTGTAACATTTCCCAACGCTGCTCAGCAGGAAACGTCACCCACGCGCA 4727
DB 4561 TGACACCATTTGTAACATTTCCCAACGCTGCTCAGCAGGATGTTAAACGCCCA 4620
QY 4728 CTTGTGCGGCGCAGATTAATGATGATGATGATGATGATGATGATGATGATGATG 4777
DB 4621 CCAATGACACACGACGATGATGATGATGATGATGATGATGATGATGATGATGATG 4670

```

RESULT 3

```

US-10-187-253A-26
; Sequence 26, Application US/10187253A
; Publication No. US20030170612A1
; GENERAL INFORMATION:
; APPLICANT: Pichante, Sergio
; APPLICANT: Shyamala, Venkatakrishna
; TITLE OF INVENTION: DIAGNOSTIC ASSAYS FOR PARVOVIRUS B19
; FILE REFERENCE: CHIR-17194/03US / PPI7194.004
; CURRENT APPLICATION NUMBER: US/10187,253A
; NUMBER OF SEQ ID NOS: 92
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 26
; LENGTH: 2380
; TYPE: DNA

```

```

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: VPI from
; US-10-187-253A-26

```

```

Query Match
Best Local Similarity 38.0%; Score 1912.6; DB 15; Length 2380;
Matches 2077; Conservative 0; Mismatches 274; Indels 0; Gaps 0;

```

```

QY 2331 AGATTATGATTAACCACTAACAATGATGGAAGAAACGCTGACAAATTTGCCAGACG 2390
DB 18 ACAAAATGATTAAGAAAGAGGCAAAATGGGAAAGTATATTAATTTGCTAAAGCTG 77
QY 2391 TGTATAGCATTTGTCACATTTTATGAAAAAGTACTGGAACACACTTAAGCTTATTC 2450
DB 78 TGTATAGCATTTGTCACATTTTATGAAAAAGTACTGGAACACACTTAAGCTTATTC 137
QY 2451 AAATTTTAAAGACATTAACAATTTCTTATGATTAATCTTTAGAAAACCCCTCTTCTT 2510
DB 138 AAATTTTAAAGACATTAACAATTTCTTATGATTAATCTTTAGAAAACCCCTCTTCTT 197
QY 2511 TAATTTGACTTATGCTGCTGATTAAGAAATCTTAAATCTTAAATCTTCAAGCTATATGTC 2570
DB 198 TGTATGACTTATGCTGCTGATTAAGAAATCTTAAATCTTAAATCTTCAAGCTATATGTC 257
QY 2571 ATCATTTTCAAGACATGAGACATTAATCTGACACCCCATGCTTATCATTCAGATAC 2630
DB 258 ATCATTTTCAAGACATGAGACATTAATCTGACACCCCATGCTTATCATTCAGATAC 317
QY 2631 GTATGACGAACCTTACAGAGAAATGAGATTAATCTTATGAGAACTTACACAACTG 2690
DB 318 GTATGACGAACCTTACAGAGAAATGAGATTAATCTTATGAGAACTTACACAACTG 377
QY 2691 GGCAGATGACATTAATTAACCGGTTAATCTTATGTTGGGCTGCAATGAGCTTAAAG 2750
DB 378 GGCAGATGACATTAATTAACCGGTTAATCTTATGTTGGGCTGCAATGAGCTTAAAG 437
QY 2751 CTGGGCTCGCAGAAATGCTGATGACAGTCTCAAGAAATTAATGATTAATGATAGG 2810
DB 438 CTGGGCTCGCAGAAATGCTGATGACAGTCTCAAGAAATTAATGATTAATGATAGG 497
QY 2811 AATGCTAATGTTGGGAAATTAATCTTATACATTTGACGATGAGATGAAAGATTTG 2870
DB 498 AATGCTAATGTTGGGAAATTAATCTTATACATTTGACGATGAGATGAAAGATTTG 557
QY 2871 TAAAAAATTAATAAATGAAACAGGTTTCAAGCAACAGATGATTAAGATTAATTTACTT 2930
DB 558 TAAAAAATTAATAAATGAAACAGGTTTCAAGCAACAGATGATTAAGATTAATTTACTT 617
QY 2931 TAAAAAGTGAAGTGCCTGCTGAGCCATTTTCAAGAAATTTTACCGGAAGTCCCGGT 2990
DB 618 TAAAAAGTGAAGTGCCTGCTGAGCCATTTTCAAGAAATTTTACCGGAAGTCCCGGT 677
QY 2991 ACAACGCTCAAGAAATTAATCCACAGATGACTTCAATTAATCTGACAGAAACGACATG 3050
DB 678 ACAACGCTCAAGAAATTAATCCACAGATGACTTCAATTAATCTGACAGAAACGACATG 737
QY 3051 GTGACAGCGGAGGAGTGAACCTTACAAAAGATGAGTGAAGGAGGCTTACATTTA 3110
DB 738 GTGACAGAGGAGGAGGAGTGAATCTTGAAGAAACATGAGTGAAGGAGGAGGCTTATTA 797
QY 3111 CTGCTAATTTCTGTAACGTGATCAATTTCTTACGCAATTTTAAATTTTATGATCCAGAGC 3170
DB 798 GTGCAACATCTGTAACGTGATCAATTTCTTACGCAATTTTAAATTTTATGATCCAGAGC 857
QY 3171 ATCATTTATTAAGTGTCTCTCCACAGACTGATGCTCCCAATGCTATGAGGAAAGAG 3230
DB 858 ACCATTTATTAAGTGTCTCTCCACAGAGTACGCTCCCAATGCTATGAGGAAAGAG 917
QY 3231 CAAAAGTGTGACATTAATGCTTATGAGGATGATGATGATGATGATGATGATGATGATG 3290
DB 918 CAAAAGTGTGACATTAATGCTTATGAGGATGATGATGATGATGATGATGATGATGATG 977

```

Oy	4371	TAACCCCTCAAAATTTTTTAAAAATACATACA.CAAAGTGGGCCAAATTGGAGTATTAAAT	4430
Db	2058	CACTCTCTCAAAATATTTTTAAAAATATTACA.CAAATGGGCCAAATTGGAGTATTAAAT	2117
Oy	4431	CCATGGGAATTTACTACTTTAGTTCAATATGCTGGGGAAATATGACAGTTAACCATGACT	4490
Db	2118	CAATGGGAATTTACTACTTTAGTTCAAGTATGCCGGGGAATTATGACAGTTAACCATGACAT	2177
Oy	4491	TTAAATTTGGGACCTCGAAGGCTATCCTGAAGGTGGAATCCCAAGCCTGGCGTTATCTC	4550
Db	2178	TTAAATTTGGGCCCCCGTAAAGCTACCGGAGCGGTGAATTCCTCAACCTGGAGTATCCCC	2237
Oy	4551	CTCATGCACTGGTCATTTAACCATATGTACTGTATGACCCCA.CAGCTACAGATGCCAAAGC	4610
Db	2238	CGCAGCGAGCAGGGTCATTTACCATATGTACTATATATGACCCCA.CAGCTACAGATGCCAAAGC	2297
Oy	4611	AAACCCA.CAACAACGATATGAAAAAGCCTGAAGAAATTGTGACCTGCCAAAAAGCCGTGTC	4670
Db	2298	AAACCCA.CAACAACGATATGAAAAAGCCTGAAGAAATTGTGAC.CAGCCAAAAAGCCGTGTC	2357
Oy	4671	ACCATTGTAA	4681
Db	2358	ACCATTGTAA	2368

	RESULT 4	
	US-10-187-253A-32	
	Sequence 32, Application US/10187253A	
	Publication No. US20030170612A1	
	GENERAL INFORMATION:	
	APPLICANT: Pichuanter, Sergio	
	APPLICANT: Shyamala, Venkatakrishna	
	TITLE OF INVENTION: DIAGNOSTIC ASSAYS FOR PARVOVIRUS B19	
	FILE REFERENCE: CHIR-17194/03US / PP1194_004	
	CURRENT APPLICATION NUMBER: US/10/187,253A	
	CURRENT FILING DATE: 2003-03-10	
	NUMBER OF SEQ ID NOS: 92	
	SOFTWARE: PatentIn Ver. 2.0	
	SEQ ID NO 32	
	LENGTH: 2380	
	TYPE: DNA	
	ORGANISM: Artificial Sequence	
	FEATURE:	
	OTHER INFORMATION: Description of Artificial Sequence: VP1 from	
	OTHER INFORMATION: parvovirus B19 clone 2-B6	
	US-10-187-253A-32	
Qy	Query Match	38.0%; Score 1911; DB 15; Length 2380;
	Best Local Similarity	88.3%; Pred. No. 0;
	Matches 2076; Conservative	0; Mismatches 275; Indels 0; Gaps 0;
Db	2331 AGATTAGACGTAAACAACCACTAACAAATGGTGGGGAAGCAGTAGCAAAATTTGCCAGGAGC	2390
	18 ACAAATAAGAGTAAGAAGAAAGTGCGCAATGGTGGGAAGTAGTAGTAATTTGCTAAAGCTG	77
Qy	2391 TGTATAAGCATTTGTGTGCATTTTATGTAAAAAGCTACTGAGACAGACTTAGAGCTTATTC	2450
Db	78 TGATACGCAATTTGTGTGAATTTTATGAAAAGGTTACTGAAACAGACTTAGAGCTTATTC	137
Qy	2451 AAATTTTAAAAGACCATTACAACATTTCTTAGATATATCCTTAGAAAAACCCCTCTTCT	2510
Db	138 AAAATATTTAAAAGATCATATTAAATATTTCTTAGATATATCCCTAGAAAACCCATCCCTTT	197
Qy	2511 TAATTGACTAGATGTGCTCGCATTTAAAAGATCTTTAAAAAAGCTCCAGACCTTATATAGTC	2570
Db	198 TGCTTGACTAGATGTGCTCGCATTTAAAAGATCTTTAAAAAAGCTCCAGACCTTATATAGTC	257
Qy	2571 ATCATTTTCAGAGCCCATGACAGTTATCTGACCAACCCCAAGCCTTATCATCCAGTAGACA	2630
Db	258 ATCATTTTCAGAGCCCATGACAGTTATCTGACCAACCCCAAGCCTTATCATCCAGTAGACA	317
Qy	2631 GTATGTGAGAAAGCTAGAGGAGAAATGCAAGTATATCTAGTGAAGCTTACACAGAGCTG	2690

Db 318 GTGATGAGAACCTAGAGAGAAATGCAATTAATCTAGTGAAGACTTACACAGCTG 377
 Qy 2691 GGCAAGTTAGCATACATTAACCCGTAATTAATGTTGGGCTGCGCATAGAGCTACAG 2750
 Db 378 GGCAAGTTAGCATACATTAACCCGTAATTAATGTTGGGCTGCGCATAGAGCTACAG 437
 Qy 2751 CTGGGCTGCGCATAGAGCTGTTGACAGTGTGCAAGAGATTCATGATTAAGTATGCC 2810
 Db 438 CTGGGCTGCGCATAGAGCTGTTGACAGTGTGCAAGAGATTCATGATTAAGTATGCC 497
 Qy 2811 AATTGCTAGTGGGAAATTAATCTTTATACATTTGACATTTGACATTTGACATTTGAC 2870
 Db 498 AACTGCTAGTGGGAAATTAATCTTTATACATTTGACATTTGACATTTGACATTTGAC 557
 Qy 2871 TAAAAAT 2930
 Db 558 TAAAAAT 2990
 Qy 2931 TAAAAAGTGAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2990
 Db 618 TAAAAAGTGAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 677
 Qy 2991 ACAAAGCTGCAAGAAAT 3050
 Db 678 ACAAAGCTGCAAGAAAT 737
 Qy 3051 GTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 3110
 Db 738 GTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 3170
 Qy 3111 CTGCTAATTTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 3170
 Db 798 GTGCTAATTTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 857
 Qy 3171 ATCAT 3230
 Db 858 ACAT 917
 Qy 3231 CAAAAGTGTGCAATTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3290
 Db 918 CAAAAGTGTGCAATTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 977
 Qy 3291 TTAATGCTTAAATTTGTTTCTGCAATTAATGCTGCTGCTGCTGCTGCTGCTGCTG 3350
 Db 978 TTAATGCTTAAATTTGTTTCTGCAATTAATGCTGCTGCTGCTGCTGCTGCTGCTG 1037
 Qy 3351 GTAT 1097
 Db 1098 GAAAT 1157
 Qy 3471 TATGAT 3530
 Db 1158 TATGAT 1217
 Qy 3531 CAGAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3590
 Db 1218 CAGAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1277
 Qy 3591 TAAACACACAGAGATTTGAGAGACAGCAAAAATTTGCTATATATATATATATATAT 3650
 Db 1278 TAAACACACAGAGATTTGAGAGACAGCAAAAATTTGCTATATATATATATATATAT 3710
 Qy 3651 ATGTGTTAGAGACAGTCAATTTGAACTTTTGGGATGAGGGGATGCTGCAATATGCT 3770
 Db 1338 ATGTGTTAGAGACAGTCAATTTGAACTTTTGGGATGAGGGGATGCTGCAATATGCT 1397
 Qy 3771 ACAAATTTGCAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3770
 Db 1398 ACAAATTTGCAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1457

Qy 3771 TGTATACACCTTTGATAGGCTTCTGTTTAAAGGATCCTGACATTAAGAGAGGACCTTA 3830
 Db 1458 TGTATACACCTTTGATAGGATCCTGTTAAAGGATCCTGACATTAAGAGAGGACCTTA 1517
 Qy 3831 AATTAT 3890
 Db 1518 AATTAT 3950
 Qy 3891 CAAT 3950
 Db 1578 CAAT 1637
 Qy 3951 CCTTACAGGCTTATAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4010
 Db 1638 CCTTACAGGCTTATAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1697
 Qy 4011 CAGTATCTAGGCTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4070
 Db 1698 CAGTATCTAGGCTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1757
 Qy 4071 TTTTCAATGACAAACCACTTATGAAATGCTGAGGACAAAGATATGCAAGATTAATGCA 1757
 Db 1758 TTTTCAATGACAAACCACTTATGAAATGCTGAGGACAAAGATATGCAAGATTAATGCA 1817
 Qy 4131 GAAATTTTCAATGACAAACCACTTATGAAATGCTGAGGACAAAGATATGCAAGATTA 1817
 Db 1818 GAAATTTTCAATGACAAACCACTTATGAAATGCTGAGGACAAAGATATGCAAGATTA 1877
 Qy 4191 ACTTCCCTAT 1877
 Db 1878 ACTTCCCTAT 1937
 Qy 4251 GCTGCTTGTGAAAGAGGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1937
 Db 1938 GCTGCTTGTGAAAGAGGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1997
 Qy 4311 ACTTAT 1997
 Db 1998 ACTTAT 2057
 Qy 4371 CACCCCTCAAT 2057
 Db 2058 CACCCCTCAAT 2117
 Qy 4431 CCAATGGAATTTACTTATGTTCAATATATATATATATATATATATATATATATATAT 2117
 Db 2118 CCAATGGAATTTACTTATGTTCAATATATATATATATATATATATATATATATATAT 2177
 Qy 4491 TTAATTTGGGACCTGGAAGGCTATGGAAGGTAATCCCAAGCTGAGGCTTATATCTG 2177
 Db 2178 TTAATTTGGGACCTGGAAGGCTATGGAAGGTAATCCCAAGCTGAGGCTTATATCTG 2237
 Qy 4551 CTATGAGCTGCTGCTTAT 2237
 Db 2238 CTATGAGCTGCTGCTTAT 2297
 Qy 4611 AACACACACAGAGATTAATGAAAGGCTGAAAGATTTGAGCTGCAAGAGGCTGCTG 2297
 Db 2298 AACACACACAGAGATTAATGAAAGGCTGAAAGATTTGAGCTGCAAGAGGCTGCTG 4670
 Qy 4671 ACCATTTGTA 4681
 Db 2358 ACCATTTGTA 2368

RESULT 5
 US-09-792-630-44
 ; Sequence 44, Application US/09792630
 ; Patent No. US20020168640A1
 ; GENERAL INFORMATION:
 ; APPLICANT: LI, Min
 ; APPLICANT: Dahiyat, Basail I.

TITLE OF INVENTION: BIOCHIPS COMPRISING NUCLEIC ACID/PROTEIN-CONJUGATES
FILE REFERENCE: A-70295/RFT/RMS/BMK
CURRENT APPLICATION NUMBER: US/09/792,630
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 87
SOFTWARE: PatentIn version 3.1
SEQ ID NO 44
LENGTH: 2016
TYPE: DNA
ORGANISM: Erythrovirus B19
US-09-792-630-44

Query Match 31.5%; Score 1585.6; DB 9; Length 2016;
Best Local Similarity 86.7%; Pred. No. 0;
Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;

QY 328 ATGAGCTATTTGCGGGTGTCTTGACATTTCTCTAATTTGAGAGCTGAT 387
DB 1 ATGAGCTATTTAGAGGGTCTTCAAGTTTCTTCTAATTTGAGAGCTGAT 60
QY 388 AACTGTGTGCTCTAATGCTAATGCTAATGCTAATGCTAATGCTAATGCT 447
DB 61 AACTGTGTGCTCTTCTAATGCTAATGCTAATGCTAATGCTAATGCTAATGCT 120
QY 448 AACGATTAATGCAATATTTAAGAGTGTGCTTAACTTGAATTTACTGGGGG 507
DB 121 AACGATTAATGCAATATTTAAGAGTGTGCTTAACTTGAATTTACTGGGGG 180
QY 508 CCGCTACAGCTGCTTATATCTTTTTCAGGTGAGTAAACAATTTGAGAGCTAT 567
DB 181 CCACTACAGAGGCTCTTACTTTTTCAGGTGAGTAAACAATTTGAGAGCTAT 240
QY 568 CATATCATGATGATTTGCTGTGCTGCAAGACTAATGCTAATGCTAATGCT 627
DB 241 CATATCATGATGATTTGCTGTGCTGCAAGACTAATGCTAATGCTAATGCT 300
QY 628 GAAGGTTATTTAATGATTTCTTTACATCTTGAATGTAAGTAACTTAATTT 687
DB 301 GAAGGTTATTTAATGATTTCTTTACATCTTGAATGTAAGTAACTTAATTT 360
QY 688 TTGCGAGGATGACTACCAAGAAATATTTTGAAGTGAAGAGCTTATGAAT 747
DB 361 TTGCGAGGATGACTACCAAGAAATATTTTGAAGTGAAGAGCTTATGAAT 420
QY 748 TACTTATGAAAAAATTCCTTAAATGTTGTGTGTGTAACAATATTTAGCGGTAT 807
DB 421 TACTTATGAAAAAATTCCTTAAATGTTGTGTGTGTAACAATATTTAGCGGTAT 480
QY 808 ATAGACACTGTATTTCCGCTCTTTTCGCGAGAGCTGTCAATGCTAAAGACCCGCG 867
DB 481 ATAGACACTGTATTTCCGCTCTTTTCGCGAGAGCTGTCAATGCTAAAGACCCGCG 540
QY 868 ATTAGCTCAATATGAGACAGTCTACTAATGAAATCTGGAGTCTAGCTGTGAGGGGGA 927
DB 541 ATTAGCTCAATATGAGACAGTCTACTAATGAAATCTGGAGTCTAGCTGTGAGGGGGA 600
QY 928 GATGTGTGCTATCGCTGGAAGGGAACAAGCGGGGTTAAAGTTTCAACCATGCTA 987
DB 601 GATGTGTGCTATTAATGGAAGGGAACAAGCTGATTAAGTTTCAACCATGCTA 660
QY 988 AATTGGCTATGTGAAAACAGATATTTACTGAAGATGAATGAATTAAGTGAATTTTAC 1047
DB 661 AATTGGCTATGTGAAAACAGATATTTACTGAAGATGAATGAATTAAGTGAATTTTAC 720
QY 1048 CAATATCTTTATTAATGAGTCAAGTGTGAGTCTTCAATTTCAAGTGTCTTAAG 1107
DB 721 CAATATCTTTATTAATGAGTCAAGTGTGAGTCTTCAATTTCAAGTGTCTTAAG 780
QY 1108 TTAGCTATTTAATGAGTCAATGATGATGATGATGATGATGATGATGATGATGAT 1167
DB 781 TTAGCTATTTAATGAGTCAATGATGATGATGATGATGATGATGATGATGATGATGAT 840
QY 1168 TTGAGCAGGTTACTTGCAATTAAGAAATTAATTAATTAATTAATTAATTAATTAAT 1227

DB 841 TTGAGAGGTTATGCTATTAAGAAATTAATTTGATTAATTTGATTTGCAAAAC 900
QY 1228 TATGATCTCTTTTATGAGGCTCAATGTGTTAAGTGATGTAACAAAATGTGTAA 1287
DB 901 TATGATCTCTTTTATGAGGCTCAATGTGTTAAGTGATGTAACAAAATGTGTAA 960
QY 1288 AAAAACAACCTGTGTTTATGAGGCTCAATGTGTTAAGTGATGTAACAAAATGTGT 1347
DB 961 AAAAACAACCTGTGTTTATGAGGCTCAATGTGTTAAGTGATGTAACAAAATGTGT 1020
QY 1348 ATTAGCTAAATCTGATCAAGTGTATGATGATGATGATGATGATGATGATGATGAT 1407
DB 1021 ATTAGCTAAATCTGATCAAGTGTATGATGATGATGATGATGATGATGATGATGAT 1080
QY 1408 AATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1467
DB 1081 AATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1140
QY 1468 GTGGAAGCTGCAAAAGCAATTTAAGTGTGATGATGATGATGATGATGATGATGAT 1527
DB 1141 GTGGAAGCTGCAAAAGCAATTTAAGTGTGATGATGATGATGATGATGATGATGAT 1200
QY 1528 GGCAGTGTGCAAGTGTGCTGTGCTGTGATTAACAGCAATGATGATGATGATGAT 1587
DB 1201 GGCAGTGTGCAAGTGTGCTGTGCTGTGATTAACAGCAATGATGATGATGATGAT 1260
QY 1588 GTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1647
DB 1261 GTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1320
QY 1648 AAGTAACTTTAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1707
DB 1321 AAGTAACTTTAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1380
QY 1708 CAACATGCTAATCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1767
DB 1381 CAACATGCTAATCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1440
QY 1768 AACTACATTTGATTTCCCTGGAATTAATGATGATGATGATGATGATGATGAT 1827
DB 1441 AACTACATTTGATTTCCCTGGAATTAATGATGATGATGATGATGATGATGAT 1500
QY 1828 ACCCATGCTGCAAGCAATGATGATGATGATGATGATGATGATGATGATGATGAT 1887
DB 1501 ACCCATGCTGCAAGCAATGATGATGATGATGATGATGATGATGATGATGATGAT 1560
QY 1888 AGTGAAGCAGCTTTTCAACTCATCACTCAGAGGCTGGAACAGTGAACCCGCGC 1947
DB 1561 AGTGAAGCAGCTTTTCAACTCATCACTCAGAGGCTGGAACAGTGAACCCGCGC 1620
QY 1948 TCTAGTACGCGCGTCCCGGAGCAAGTCAAGAAATCATTTGTGGAACCCAGTTTC 2007
DB 1621 TCTAGTACGCGCGTCCCGGAGCAAGTCAAGAAATCATTTGTGGAACCCAGTTTC 1680
QY 2008 TCCGAATGTGATGCGGTGTGAGGAGAACTTTTACAGCGCGCTGCGCATCACTT 2067
DB 1681 TCCGAATGTGATGCGGTGTGAGGAGAACTTTTACAGCGCGCTGCGCATCACTT 1740
QY 2068 CGTGAATGTGATGAGGAGTTGACTTTGATGAGGATGATGAGGAGTTGCTGTTGC 2127
DB 1741 CGTGAATGTGATGAGGAGTTGACTTTGATGAGGATGATGAGGAGTTGCTGTTGC 1800
QY 2128 TGTGTGAAATATTAACCAAGTGTGAGGAGTTGAGGAGTTGCTGTTGATTAAT 2187
DB 1801 TGTGTGAAATATTAACCAAGTGTGAGGAGTTGAGGAGTTGCTGTTGATTAAT 1860
QY 2188 GTGAGAGCTGTGATTAAGTGAATTAAGTGAATTAAGTGAATTAAGTGAATTAAG 2247
DB 1861 GTGAGAGCTGTGATTAAGTGAATTAAGTGAATTAAGTGAATTAAGTGAATTAAG 1920
QY 2248 AGTTGATGATGAGAGCTGATCAATTTCTGTGTTAATTTGATTAATTTGATTTAC 2307

Db 1921 AGCTGCCANGTGGAGCTTCTAATCCCTTTCTGCTAGCTAGCGAAAAATGCTTAC 1980
Qy 2308 CTGCTGATTAACAAGTTTGTAGATTGTGCTAA 2343
Db 1981 CTGCTGATTCGAAAGCTTGTGATTAATAGATTA 2016

RESULT 6

US-09-953-351-44
; Sequence 44, Application US/09953351
; Publication No. US20030036643A1
; GENERAL INFORMATION:
; APPLICANT: Li, Min
; APPLICANT: Melander, Christian
; APPLICANT: Liu, Hong-Xiang
; APPLICANT: Jin, Cheng He
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE CONSTRUCTION AND USE OF FUSION I
; FILE REFERENCE: A-70814/RPT/RMS/RMK
; CURRENT APPLICATION NUMBER: US/09/953,351
; PRIOR FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: US 60/232,960
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 44
; LENGTH: 2016
; TYPE: DNA
; ORGANISM: Erythrovirus B19
US-09-953-351-44

Query Match 31.5%; Score 1585.6; DB 10; Length 2016;
Best Local Similarity 86.7%; Pred. No. 0;
Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;

Qy 328 ATGAGCTATTTGGGGGCTCTTGCAACATTCCTCTTAACATTCGTGACGTGCTAATGAT 387
Db 1 ATGAGCTATTTAGAGGGGTGCTTAAGTTCTCTTAATGTTCTGAGCTGCTAAGAT 60
Qy 388 AACTGTGTGCTCTATGCTAGACTTAATCTTCTGAGGAAACCACTAACCATCTT 447
Db 61 AACTGTGTGCTCTTACTGATTTAACACTTCTGAGGAAACCACTAACCATCTT 120
Qy 448 AACAGTTAATGGCAATATTTAAGCAGTGTCTCTTAACATTTTACTGAGGGG 507
Db 121 AACAGCTAATGGCAATATTTAAGCAGTGTCTCTTAACATTTTACTGAGGGG 180
Qy 508 CCGCTAGAGGTGCTTACTTCTTCAAGTGAAGTAACTAATTTGAGAGCTAT 567
Db 181 CCACTAGAGGTGCTTACTTCTTCAAGTGAAGTAACTAATTTGAGAGCTAT 240
Qy 568 CATATCCATGATTTATTTGCTGCTCAAGCTAATGCTAAGAACTTAATGCTGCTA 627
Db 241 CATATCCATGATTTATTTGCTGCTCAAGCTAATGCTAAGAACTTAATGCTGCTA 300
Qy 628 GAAGTTATTTAATATGTTCTTACCATCTTGTAACTGAAGTCTTAATTT 687
Db 301 GAGGGTATTTAATATGTTCTTACCATCTTGTAACTGAAGTCTTAATTT 360
Qy 688 TTGCGAGGATGCTACCAAGAAATTTTGAAGATGAGACAGATTTATAGAAAT 747
Db 361 TTGCGAGGATGCTACCAAGAAATTTTGAAGATGAGACAGATTTATAGAAAT 420
Qy 748 TACTTAATGAAAAATTCCTTAATGTTGTGTGTGTGCTAATTAATTTGAGCGGTAT 807
Db 421 TATTTAATGAAAAATTCCTTAATGTTGTGTGTGTGCTAATTAATTTGAGCGGTAT 480
Qy 808 ATGACACCGTATTTCCGCTCTTTTCGCGAGAGGCTTGTCAATGCTAAGACCCCGC 867
Db 481 ATGACACCGTATTTCCGCTCTTTTCGCGAGAGGCTTGTCAATGCTAAGACCCCGC 540
Qy 868 ATTTAGCAATATGACAGAGTGTCTATGTAAGAACTGGGGAGTCTAGCTGAGAGGGGA 927
Db 541 ATTTAGCAATATGATATGATATGATGCTAGTGTGGAGGCTTACCGGACAGAGGGCA 600

Qy 928 GATTTGTGCAATTCGCTGGAAGAAAGCAAAAGCGGGTTAAAGTTTCAACATGATGA 987
Db 601 GAGGTGTGCAATTTAATGGGAAGGAACTAAGGCTAGCAATTAAGTTTCAACATGATGA 660
Qy 988 AATTGCAATGTAAGAAACAGATTTTCTGAAGATTAATGAAATTTAGTGAATTTTAC 1047
Db 661 AACTGTGTGTGTAAGAAACAGATTTTCTGAAGATTAATGAAATTTAGTGAATTTTAC 720
Qy 1048 CATATATCTTATTAATGATGACAGTCAAGTGGAGCTTCAATTTCAAGTCTTAAG 1107
Db 721 CAGTACACTTATTAAGCAGTACAGTCAAGTGAAGTTTCAATTTCAAGTCTTAAG 780
Qy 1108 TTGCTATTTAATGATGCTAATCTTAATGATGATGATGATGATGATGATGATGATGAT 1167
Db 781 CTAGCAATTTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 840
Qy 1168 TTGAGCAGGTTACTGCTAATTAAGAAATTAATTAATTTATTTGCTCAAAAC 1227
Db 841 TTGAGCAGGTTATGATTTAAGAAATTAATTAATTTATTTGCTCAAAAC 900
Qy 1228 TATGATCTCTTTTATGAGGCTCAATGATGATGATGATGATGATGATGATGATGAT 1287
Db 901 TATGATCTCTTTTATGAGGCTCAATGATGATGATGATGATGATGATGATGATGAT 960
Qy 1288 AAAACACCTGCTGTTTAAAGGCAACAGTCTGGAAGAAATTTGGCAATGGCT 1347
Db 961 AAAAATACCTGCTGTTTAAAGGCAACAGTCTGGAAGAAATTTGGCAATGGCT 1020
Qy 1348 ATTTGCTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1407
Db 1021 ATTTGCTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1080
Qy 1408 AATGATGAGGAGGAAAGTTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1467
Db 1081 AATGATGAGGAGGAAAGTTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1140
Qy 1468 GTGAGGCTGGAAGCAATTTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1527
Db 1141 GTGAGGCTGGAAGCAATTTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1200
Qy 1528 GGCAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1587
Db 1201 GGAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1260
Qy 1588 GTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1647
Db 1261 GTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1320
Qy 1648 AAGCTAATCTTAACATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1707
Db 1321 AAGCTAATCTTAACATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1380
Qy 1708 CAACATGCTAATCTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1767
Db 1381 CAACATGCTAATCTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1440
Qy 1768 AACTACATTTGATTTCCCTGGAATTAATGCAATGCTTCCCAACCAATCTCAAAAC 1827
Db 1441 AACTACATTTGATTTCCCTGGAATTAATGCAATGCTTCCCAACCAATCTCAAAAC 1500
Qy 1828 ACCCCATTTTCCCAAGACCAAGATGATGATGATGATGATGATGATGATGATGATGAT 1887
Db 1501 ACCCCATTTTCCCAAGACCAAGATGATGATGATGATGATGATGATGATGATGATGAT 1560
Qy 1888 AATGAAAGCACTTTTCAACCTGATGATGATGATGATGATGATGATGATGATGATGAT 1947
Db 1561 AATGAAAGCACTTTTCAACCTGATGATGATGATGATGATGATGATGATGATGATGAT 1620
Qy 1948 TCTAGTACGCGCGTCCCGGAGCAAGTTCAGAGAAATCTTTGTGGAAGCCCACTTCC 2007
Db 1621 TCTAGTACGCGCGTCCCGGAGCAAGTTCAGAGAAATCTTTGTGGAAGCCCACTTCC 1680

QY 1768 AACTACATTTGATTTCCCTGGAATTAATGAGATGCTTCCACCCAGATCTCCAAAC 1827
 Db 1441 AACTACATTTGATTTCCCTGGAATTTAATGAGATGCTTCCACCCAGATCTCCAAAC 1500
 QY 1828 ACCCCATTTGCTCCAGACACACAGATATGAGAGATGAGTGAAGGCTGGAAGATC 1887
 Db 1501 ACCCCATTTGCTCCAGACACACAGATATGAGAGATGAGTGAAGGCTGGAAGATC 1560
 QY 1888 AGTGAAGAGCTTTTTCATCTCACTCAAGCCCTGGAACAGTGAAGCCCGCGC 1947
 Db 1561 AGTGAAGAGCTTTTTCATCTCACTCAAGCCCTGGAACAGTGAAGCCCGCGC 1620
 QY 1948 TCTAGAGCCCGCTCCCGGAGACAGTTCAGAGATATTTGTCGAGCCAGTTCC 2007
 Db 1621 TCTAGAGCCCGCTCCCGGAGACAGTTCAGAGATATTTGTCGAGCCAGTTCC 1680
 QY 2008 TCCGAGTGTAGCCGCTGCTGAGGAGAGCTTTTTCACGCGCTTCCGATCAGTT 2067
 Db 1681 TCCGAGTGTAGCTGCTGAGGAGAGCTTTTTCACGCGCTTCCGATCAGTT 1740
 QY 2068 CGTGAACCTTTAGTGAAGGCTTGAATGAGATGCTGAGGAGATTTGCTGTTCC 2127
 Db 1741 CGTGAACCTTTAGTGAAGGCTTGAATGAGATGCTGAGGAGATTTGCTGTTCC 1800
 QY 2128 TGTGTGACATATTAACAACAGTGGGAGAGCTTGGGCTTTGCTCATTTGATTAAT 2187
 Db 1801 TGTGTGACATATTAACAACAGTGGGAGAGCTTGGGCTTTGCTCATTTGATTAAT 1860
 QY 2188 GTGGAGCTTGTATTAATGAGATGAATTTAGAGATTTTACGAGCTTGTGCTGC 2247
 Db 1861 GTGGAGCTTGTATTAATGAGATGAATTTAGAGATTTTACGAGCTTGTGCTGC 1920
 QY 2248 AGTTGATGATGAGAGCTTCAACCATTTTCTGCTTACCTTTGAAAAATGCTTAC 2307
 Db 1921 AGTTGATGATGAGAGCTTCAACCATTTTCTGCTTACCTTTGAAAAATGCTTAC 1980
 QY 2308 CTGTCTGATTAACAAGTTTGTAGATTAAGATTA 2343
 Db 1981 CTGTCTGATTAACAAGTTTGTAGATTAAGATTA 2016

RESULT 8
 US-10-082-671-50
 ; Sequence 50, Application US/10082671
 ; Publication No. US20030049647A1
 ; GENERAL INFORMATION:
 ; APPLICANT: DAHMYAT, BASSIL
 ; TITLE OF INVENTION: USE OF NUCLEIC ACID LIBRARIES TO CREATE TOXICOLOGICAL
 ; FILE OF INVENTION: XEN/001
 ; CURRENT APPLICATION NUMBER: US/10/082,671
 ; PRIOR FILING DATE: 2002-05-17
 ; PRIOR APPLICATION NUMBER: 60/270,781
 ; NUMBER OF SEQ ID NOS: 58
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 50
 ; LENGTH: 2016
 ; TYPE: DNA
 ; ORGANISM: Erythrovirus B19
 US-10-082-671-50

Query Match 31.5%; Score 1585.6; DB 15; Length 2016;
 Best Local Similarity 86.7%; Pred. No. 0;
 Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;

QY 328 ATGGAGCTATTTCCGGGCTCTTTCAGACATTTCTCTTAACATTTGAGCTGCTAATGAT 387
 Db 1 ATGGAGCTATTTTCAGAGGCTCTTTCAGATTTCTCTTAATGTTTGGAGCTGTGCTAAGAT 60
 QY 388 AACTGTGTGCTCTTATGCTAGACTTATGATCTTCTGAGGAGACATTAACCATTTCT 447

Db 61 AACTGTGTGCTCTTATGCTAGACTTATGATCTTCTGAGGAGACATTAACCATTTCT 120
 QY 448 AACAGATTAATGAGCAATATTTAAGAGATGCTTCTTAACTTGAATTTTACTGAGGAG 507
 Db 121 AACAGATTAATGAGCAATATTTAAGAGATGCTTCTTAACTTGAATTTTACTGAGGAG 180
 QY 508 CCGCTAGAGCTTCTTATATCTTTTTCAGGTGGAATGTAACTTAATTTAGAGAGCTAT 567
 Db 181 CCGCTAGAGCTTCTTATATCTTTTTCAGGTGGAATGTAACTTAATTTAGAGAGCTAT 240
 QY 568 CATATCATGATGATTAATGAGTCCAGAGCTAATGCTGAAGATTTAACTGTGTGCTA 627
 Db 241 CATATCATGATGATTAATGAGTCCAGAGCTAATGCTGAAGATTTAACTGTGTGCTA 300
 QY 628 GAGGCTTTATTAATATGTTCTTTTCACTCTGTGTAACTGAAGTGAATTTAACTTAA 687
 Db 301 GAGGCTTTATTAATATGTTCTTTTCACTCTGTGTAACTGAAGTGAATTTAACTTAA 360
 QY 688 TTGCAAGGATGATCTCAAAAGGAAATTTTAAAGATGAGAGAGCTTTATAGAAAT 747
 Db 361 TTGCAAGGATGATCTCAAAAGGAAATTTTAAAGATGAGAGAGCTTTATAGAAAT 420
 QY 748 TACTTAATGAAATTTCTTTAATGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 807
 Db 421 TACTTAATGAAATTTCTTTAATGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 480
 QY 808 ATGACACCTGATTTCCGCTCTTTTGGGAGAGCTTGTCAATGCTTAAGAACCCCGC 867
 Db 481 ATGACACCTGATTTCCGCTCTTTTGGGAGAGCTTGTCAATGCTTAAGAACCCCGC 540
 QY 868 ATTTACGCAATACAGACAGCTACTAATGAATCTGAGGAGCTGTGCTGTGAGGAG 927
 Db 541 ATTTACGCAATACAGACAGCTACTAATGAATCTGAGGAGCTGTGCTGTGAGGAG 600
 QY 928 GATGTTGTGCTTCCGCTGGAAGGAAACAAAGCGGCTTAAAGTTCAACCATGATTA 987
 Db 601 GATGTTGTGCTTCCGCTGGAAGGAAACAAAGCGGCTTAAAGTTCAACCATGATTA 660
 QY 988 AATTGCTATGTGAAACAGAGATTTTCTGAAGATTAATGAGAAATTAATGATTTTAAC 1047
 Db 661 AATTGCTATGTGAAACAGAGATTTTCTGAAGATTAATGAGAAATTAATGATTTTAAC 720
 QY 1048 CAATATCTTTAATTAAGTACAGTCAAGAGGAGCTTTCAATTAAGTCCCTTAAG 1107
 Db 721 CAATATCTTTAATTAAGTACAGTCAAGAGGAGCTTTCAATTAAGTCCCTTAAG 780
 QY 1108 TTAGCTATTTAATAAGCTAATTAATGATTAATGATTAATGATTAATGATTAATG 1167
 Db 781 TTAGCTATTTAATAAGCTAATTAATGATTAATGATTAATGATTAATGATTAATG 840
 QY 1168 TTGAGCAGGTTACTGATTAATGAAGAAATTAATGATTAATGATTAATGATTAATG 1227
 Db 841 TTGAGCAGGTTACTGATTAATGAAGAAATTAATGATTAATGATTAATGATTAATG 900
 QY 1228 TATGATCTCTTTTATGAGGCTCAATGATGTTAAGTGTGATTAAGTGTGATTAAG 1287
 Db 901 TATGATCTCTTTTATGAGGCTCAATGATGTTAAGTGTGATTAAGTGTGATTAAG 960
 QY 1288 AAAAACAACCTGTGCTTTTAAAGGCGCACTAAGTCTGAAAAACAATTTGGCAATG 1347
 Db 961 AAAAACAACCTGTGCTTTTAAAGGCGCACTAAGTCTGAAAAACAATTTGGCAATG 1020
 QY 1348 ATTTGTAATCTGTAACAGTGTATGAGATGATTAATGATTAATGATTAATGATTAAT 1407
 Db 1021 ATTTGTAATCTGTAACAGTGTATGAGATGATTAATGATTAATGATTAATGATTAAT 1080
 QY 1408 AATGATGATGAGGAGAAAGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1467
 Db 1081 AATGATGATGAGGAGAAAGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1140
 QY 1468 GTGAGAGCTGAAAGCAATTTTATGAGTGTGAGCAACAGGAGTGTGATTAAGTGTGT 1527
 Db 1141 GTGAGAGCTGAAAGCAATTTTATGAGGCAACCAAGGATGATTAAGTGTGTGTGT 1200

1528 GGAGTGTGACAGTGGCCGGTGGCTGTGGTTTAAACGAGCATGTGGACATTACATTT 1587
1201 GGAAGTGTACCTGTGGTGAATCTGTGTATTAACGAGCAATGTGACATTACTTTT 1260
1588 GTTGTGAGTGTATATACCACTACCACTGTGCATCTAAAGCTTAAAGAACGGATGTA 1647
1261 GTTGTAGGGGGAACCTACACCAACTGTATCTTAAGCTTAAAGGCGCATGTGTA 1320
1648 AACGTAACTTTTACCATTAAGATGTAGCCCTGACATGGGTTTACTTACAGAGCTGATGTA 1707
1321 AAGTTAACTTTTACTGTAAATGATGACGCCCTGACATGGGTTTACTTAAAGAGCTGATGTA 1380
1708 CAACAAATGGCTACTGTGTGTAAATGCAAAAGCTGGAGCCACTATGAAAATGGGCAATA 1767
1381 CAACAGTGGCTTAAATGTGTAAATGCAAAAGCTGGAGCCACTATGAAAATGGGCAATA 1440
1768 AACTACACATTTGATTTCCCTGGAATTAATGACAGATGCCCTCAACCAAGATCTTCAAAAC 1827
1441 AACTACACATTTGATTTCCCTGGAATTAATGACAGATGCCCTCAACCAAGATCTTCAAAAC 1500
1828 ACCCCCATTTGCCAGACACACAGTATCAGACAGTGTGTGTAAGCTTGAAGAACTC 1887
1501 ACCCCCATTTGTCAACAGACACAGTATCAGACAGTGTGTGTAAGCTTGAAGAACTC 1560
1888 AATGAAAGCAGCTTTTCAACCTCATCATCCAGGCGGCTGGAAACATGTGAAACCCCGCGC 1947
1561 AATGAAAGCAGCTTTTCAACCTCATCATCCAGGCGGCTGGAAACATGTGAAACCCCGCGC 1620
1948 TCTAGTACGCGCCGTCGCCGGGACCAAGTTCAGAGAAATCATTTTGCAGAGCCAGTTTCC 2007
1621 TCTAGTACGCGCCGTCGCCGGGACCAAGTTCAGAGAAATCATTTTGCAGAGCCAGTTTCC 1680
2008 TCCGAATGTGTACCGCGTGTGGAGGAAAGCTTTTCAACGCGCTTGCAGATCACTTT 2067
1681 TCCGAATGTGTACCGCGTGTGGAGGAAAGCTTTTCAACGCGCTTGCAGATCACTTT 1740
2068 CGTGAATGTGTAGAGGGGTGACTTTGTATGGAATGTGTGAGAGGATTTGCCCTTTTC 2127
1741 CGTGAATGTGTAGAGGGGTGACTTTGTATGGAATGTGTGAGAGGATTTGCCCTTTTC 1800
2128 TGTGTGAAATATTAACAACAGTGGGGAGGAGTGTGGGCTTTTCCCTCATTTGATTAAT 2187
1801 TGTGTGAAATATTAACAACAGTGGGGAGGAGTGTGGGCTTTTCCCTCATTTGATTAAT 1860
2188 GTGGAGCTTGTATTAATGATGAAATTTAGAGATTTTACCCAGATTTGGTGGCTGC 2247
1861 GTGGAGCTTGTATTAATGATGAAATTTAGAGATTTTACCCAGATTTGGTGGCTGC 1920
2248 AGTTGTGATGTAGAGGCTCTAACCCATTTTCTGTGTAACTTTGAAAAATGTGCTTAC 2307
1921 AGCTGCATGTGGAGGCTTCTAAATCCCTTTCTGTGTAACTTTGAAAAATGTGCTTAC 1980
2308 CTGTCTGATTAACAAGTTTGTGATTAATGATTA 2343
1981 CTGTCTGATTAACAAGCTTTGTGATTAATGATTA 2016

RESULT 9
US-10-097-100-44
; Sequence 44: Application US/10097100
; Publication No. US20030068649A1
; GENERAL INFORMATION:
; APPLICANT: Li, Min
; APPLICANT: Melander, Christian
; APPLICANT: Liu, Hong-Xiang
; APPLICANT: Jin, Cheng He
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE CONSTRUCTION AND USE OF FUSION I
; FILE REFERENCE: A-70814/RFT/RMS/RMK
; CURRENT APPLICATION NUMBER: US/10/097,100
; PRIOR APPLICATION NUMBER: 2002-03-12
; PRIOR FILING DATE: US/09/953,351
; PRIOR FILING DATE: 2001-09-14

PRIOR APPLICATION NUMBER: US 60/232,960
; PRIOR FILING DATE: 2000-09-14
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 44
; LENGTH: 2016
; TYPE: DNA
; ORGANISM: Erythrovirus B19
US-10-097-100-44

Query Match 31.5%; Score 1585.6; DB 15; Length 2016;
Best Local Similarity 86.7%; Pred. No. 0;
Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;

328 ATGAGCTATTTGGGGTGTCTTGACATTTCTCTTACATTTGCACTGTGCTAATGAT 387
1 ATGAGCTATTTAGAGGGGTGCTTCAAGTTTCTTAAATTTCTGACGTGTGCAAGAT 60
388 AACGTGGTGTCTCTATGCTAGACTTATGATCTTGTGAGGAAACCACTAACCATTTCT 447
61 AACTGTGTGTCTCTTACTTACTGATTTTACATCTTGTGACCTGTGAGACCACTACATCT 120
448 AACAGATTAATGCAATATATTTAAGCAGTGTGCTTAACTTGAATTTTACTGGGGGG 507
121 AACAGATTAATGCAATATATCTTAAGCAGTGTGCTTAACTTGAATTTTACTGGGGGG 180
508 CCGGTACAGGTTGCTTATATCTTTTCAAGTGTGATTAACAATTTGAGAAAGCTAT 567
181 CCACTACAGGAGGTGCTTATATCTTTTCAAGTGTGATTAACAATTTGAGAAAGCTAT 240
568 CATATCATGTATTTATGTTGTGTGCTTCAAGTGTGATTAACAATTTGAGAAAGCTAT 627
241 CATATCATGTATTTATGTTGTGTGCTTCAAGTGTGATTAACAATTTGAGAAAGCTAT 300
628 GAAGTTTATTAATATGTTCTTTTCAATCTTGTATCTGAAAGTGTAACTTAATTTT 687
301 GAAGTTTATTAATATGTTCTTTTCAATCTTGTATCTGAAAGTGTAACTTAATTTT 360
688 TTGCGAGGATGATCTACCAAGAAATATTTTGAATGAGAGAGCTTTATGAAAT 747
361 TTGCGAGGATGATCTACCAAGAAATATTTTGAATGAGAGAGCTTTATGAAAT 420
748 TACTTATGAAATTAATTTCTTTTAAATGTTGTGTGCTTCAATTAATTTGAGAGGAT 807
421 TACTTATGAAATTAATTTCTTTTAAATGTTGTGTGCTTCAATTAATTTGAGAGGAT 480
808 ATAGACACCTGTATTTCCGCTCTTTTGGGAGAGCTTGTGATGCTTAAAGACCCCGC 867
481 ATAGACACCTGTATTTCCGCTCTTTTGGGAGAGCTTGTGATGCTTAAAGACCCCGC 540
868 ATTAGCTGCAATTAACAGCAGTGTCTATGATGAAATGTGGGAGTCTAGAGGGGA 927
541 ATTAGCTGCAATTAACAGCAGTGTCTATGATGAAATGTGGGAGTCTAGAGGGGA 600
928 GATGTGTGCTATTCCTGTGAAAGGGAACAAAGCGGGTTAAAGTTTCAACCATGTA 987
601 GAGGTGTGCTATTTAATGGAAGGGAACCTAAGCTAGACATTAAGTTTCAACCATGTA 660
988 AATGTGCTATGTAAGAAACAGAGATTTTACTGAGATTAATGAAATTTAGTGTATTTTAC 1047
661 AATGTGCTATGTAAGAAACAGAGATTTTACTGAGATTAATGAAATTTAGTGTATTTTAC 720
1048 CAATATATCTTTAATTAAGTACAGTCAACAGTGTGCTTCAATTTCAAGTGTCTTAAAG 1107
721 CAATATATCTTTAATTAAGTACAGTCAACAGTGTGCTTCAATTTCAAGTGTCTTAAAG 780
1108 TTGAGTATTTAATTAAGTCTTACTAGTATGACCACTAGTATCTTGTGATTTGAGAC 1167
781 CTAGCAATTTAATTAAGCAATTAATTTAGTGTGCTTACTAGTATCTTGTGATTTGAGAC 840
1168 TTGAGCAGGTTACTGTGATTAAGAAATTAATTAATTAATTTAGTGTGATTTGAGAC 1227
841 TTGAGCAGGTTACTGTGATTAAGCAATTAATTTAGTGTGATTTGAGAC 900

QY 1228 TATGATCTCTTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1287
 DB 901 TATGATCTCTTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 960
 QY 1288 AAAAAACCCCTGTGTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1347
 DB 961 AAAAAATACACTGTGTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1020
 QY 1348 ATTGCTAAACCTGTGTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1407
 DB 1021 ATTGCTAAACCTGTGTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1080
 QY 1408 AATGATGAGCGGGGAAAGTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1467
 DB 1081 AATGATGAGCGGGGAAAGTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1140
 QY 1468 GTGAGAGCTGCAAAAGCTTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1527
 DB 1141 GTGAGAGCTGCAAAAGCTTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1200
 QY 1528 GGCAGTGTGAGCGCGGCTGTGTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1587
 DB 1201 GGCAGTGTGAGCGCGGCTGTGTTTAACTGGGCTCAACATGTTTAAAGTGGATGACAAATAATGTGTAA 1260
 QY 1588 GTTGTGAGTGTGATATACCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1647
 DB 1261 GTTGTGAGTGTGATATACCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1320
 QY 1648 AAGCTTAACTTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1707
 DB 1321 AAGCTTAACTTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1380
 QY 1708 CAACATGCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1767
 DB 1381 CAACATGCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1440
 QY 1768 AACTTAACTTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1827
 DB 1441 AACTTAACTTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1500
 QY 1828 ACCCATTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1887
 DB 1501 ACCCATTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1560
 QY 1888 AAGTAAAGCACTTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1947
 DB 1561 AAGTAAAGCACTTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1620
 QY 1948 TCTAGTACGCGGCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 2007
 DB 1621 TCTAGTACGCGGCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1680
 QY 2008 TCCGAGTGTGAGCGGCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 2067
 DB 1681 TCCGAGTGTGAGCGGCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1740
 QY 2068 CGTGAACCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 2127
 DB 1741 CGTGAACCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 1800
 QY 2128 TGTGTGAAATATTAACAAAGTGGGAGGCTTAAAGCTTAAAGGAAAGGATGTTA 2187
 DB 1801 TGTGTGAAATATTAACAAAGTGGGAGGCTTAAAGCTTAAAGGAAAGGATGTTA 1860
 QY 2188 GTGGGAGCTTGTATATGATGAGAAATTTAGAGATTAACTGAGCTTAAAGGAAAGGATGTTA 2247
 DB 1861 GTGGGAGCTTGTATATGATGAGAAATTTAGAGATTAACTGAGCTTAAAGGAAAGGATGTTA 1920
 QY 2248 AGTTGTATGATGAGAGCTTAAAGCTTAAAGGAAAGGATGTTA 2307
 DB 1921 AGTTGTATGATGAGAGCTTAAAGCTTAAAGGAAAGGATGTTA 1980

QY 2308 CTGTCTGATTAACAAGTTTGTATGATTAAGTAA 2343
 DB 1981 CTGTCTGATTAACAAGCTTTGTATGATTAAGTAA 2016

RESULT 10
 US-10-023-208-44
 ; Sequence 44, Application US/10023208
 ; Publication No. US20030124537A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Li, Min
 ; APPLICANT: Liu, Yuan-Ching
 ; TITLE OF INVENTION: PROCAROTIC LIBRARIES AND USES
 ; FILE REFERENCE: A-70174-1/REF/RMS/RMK
 ; CURRENT APPLICATION NUMBER: US/10/023, 208
 ; PRIOR FILING DATE: 2001-12-17
 ; PRIOR FILING DATE: 2000-12-14
 ; NUMBER OF SEQ ID NOS: 63
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 44
 ; LENGTH: 2016
 ; TYPE: DNA
 ; ORGANISM: Erythrovirus B19
 ; US-10-023-208-44

Query Match 31.5%; Score 1585.6; DB 15; Length 2016;
 Best Local Similarity 86.7%; Pred. No. 0;
 Matches 1747; Conservative 0; Mismatches 269; Indels 0; Gaps 0;

QY 328 ATGAGACTATTTTGGGAGTGTCTGCACTTCTTAACTGAGCTGTGTAATGAT 387
 DB 1 ATGAGACTATTTTGGGAGTGTCTTCAAGTTTCTTAACTGAGCTGTGTAATGAT 60
 QY 388 AACTGAGTGTCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 447
 DB 61 AACTGAGTGTCTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 120
 QY 448 AACGATTAATGCAATATATTTAAAGCACTGTTTAACTGAGCTGTGTAATGAT 507
 DB 121 AACGATTAATGCAATATATTTAAAGCACTGTTTAACTGAGCTGTGTAATGAT 180
 QY 508 CCGCTAGAGGTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 567
 DB 181 CCGCTAGAGGTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 240
 QY 568 CATTCATGATGTTATTTGAGGCTGAGGCTTAAAGCTTAAAGGAAAGGATGTTA 627
 DB 241 CATTCATGATGTTATTTGAGGCTGAGGCTTAAAGCTTAAAGGAAAGGATGTTA 300
 QY 628 GAAGTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 687
 DB 301 GAAGTTTAACTGATGCTTAAAGCTTAAAGGAAAGGATGTTA 360
 QY 688 TTGCGAGGATGCTTAAAGCTTAAAGGAAAGGATGTTA 747
 DB 361 TTGCGAGGATGCTTAAAGCTTAAAGGAAAGGATGTTA 420
 QY 748 TACTTAAATGAAATATTTTAAAGTGTGTTGTTAACTGAGCTTAAAGGAAAGGATGTTA 807
 DB 421 TACTTAAATGAAATATTTTAAAGTGTGTTGTTAACTGAGCTTAAAGGAAAGGATGTTA 480
 QY 808 ATGAGACCTGATTTTCCGCTTTTCCGAGAGGCTTAAAGCTTAAAGGAAAGGATGTTA 867
 DB 481 ATGAGACCTGATTTTCCGCTTTTCCGAGAGGCTTAAAGCTTAAAGGAAAGGATGTTA 540
 QY 868 ATTACTGAAATATGAGAGCTTAAAGCTTAAAGGAAAGGATGTTA 927
 DB 541 ATTACTGAAATATGAGAGCTTAAAGCTTAAAGGAAAGGATGTTA 600
 QY 928 GATGTTGTCATTTGCTGAGAAAGGAAAGGAAAGGAAAGGATGTTA 987
 DB 601 GATGTTGTCATTTGCTGAGAAAGGAAAGGAAAGGAAAGGATGTTA 660

QY 988 AATTGCTATGTGAAAACAGAGTATTTACTGAAATGAATGAATTTAGTGAATTTTAAAC 1047
 Db 661 AACTGTTGTGTGAAAACAGAGTCTTTACAGAGATTAAGTGAACATAGTTGACTTTTAAAC 720
 QY 1048 CAATATACCTTTATTAAGTACAGTACAGTGGCAGCTTTCAATTAATCAAGTCCCTTAAAG 1107
 Db 721 CAGTACACTTTTACTTAACAGTACAGTACAGTGGAGTTTTCATTAATCAAGTCCCTTAAAG 780
 QY 1108 TTAGCTATTTTAAAGTACCTTAATTTAGTACCCCTAGTACCTTCTGTATCATTTGAGAC 1167
 Db 781 CTAGCAATTTTAAAGTACCTTAATTTAGTACCTTCTAGTACCTTTTATTTGCTATACAGAC 840
 QY 1168 TTGAGCAGGTTTCTTCAATTAAGAAAATTAATTAATTAATTTATTTGTCATAAAC 1227
 Db 841 TTGAGCAGGTTTATGTATTTAAAGACATTAATTTGTTAAATTTGTTACTTTTGTCAAAAC 900
 QY 1228 TATGATCTCTTTTAAAGTGTCAACATGTGTAAAGTGTGAACAAAATTTGTGTAA 1287
 Db 901 TATGATCTCTTTTAAAGTGTGTCAACATGTGTAAAGTGTGAATTAATTAATTTGTGTAA 960
 QY 1288 AAAAAACCCCTGTGTGTTTTACGGGCAACAGTACTGAAAAACAAATTTGGCAATGCT 1347
 Db 961 AAAAAATCACGTGTGTGTTTTATGGCCGCCCAAGTACAGGAAAAACAACTTTGGCAATGCT 1020
 QY 1348 ATTGCTAAAACTGTACAGTGTATGAATGTGTAAATTTGAAATTAATTAATTTTCCATTT 1407
 Db 1021 ATTGCTAAAAAGTGTCCAGTATATGAGCATGTGTAAATTTGAAATTAATTAATTTTCCATTT 1080
 QY 1408 AATGATGTACGGGGAAGTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1467
 Db 1081 AATGATGTACGAGGGAAGTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1140
 QY 1468 GTGAGACTGTCAAAAGCATTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1527
 Db 1141 GTGAGACTGTCAAAAGCATTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1200
 QY 1528 GGCAGTGTGCAAGTCCCGGT 1587
 Db 1201 GGAAGTGTAGT 1260
 QY 1588 GTTGTGAGTGTATATACCACTACCACTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1647
 Db 1261 GTTGTGAGT 1320
 QY 1648 AAGCTAACTTTTACCATTAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1707
 Db 1321 AAGCTAACTTTTACCATTAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1380
 QY 1708 CAACAAATGTGTACTTGT 1767
 Db 1381 CAACAAATGTGTACTTGT 1440
 QY 1768 AACTACATTTTGTATTTTCCCTGTGAATTAATGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1827
 Db 1441 AACTACATTTTGTATTTTCCCTGTGAATTAATGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1500
 QY 1828 ACCCCCATTTTCCAGACACCATGTATGACAGCAGTGTGTGTGTGTGTGTGTGTGTGTGT 1887
 Db 1501 ACCCCCATTTTCCAGACACCATGTATGACAGCAGTGTGTGTGTGTGTGTGTGTGTGTGT 1560
 QY 1888 AAGTGAAGCAGCTTTTCAACCTGTATCATCTTCCAGGCGCTGTGAACAGTGTGTGTGTGT 1947
 Db 1561 AAGTGAAGCAGCTTTTCAACCTGTATCATCTTCCAGGCGCTGTGAACAGTGTGTGTGTGT 1620
 QY 1948 TCTAGTATGCGCGTCCCGGGGACAGTTCAGAGAAATCATTTTGTGTGAAGCCAGTTTCC 2007
 Db 1621 TCTAGTATGCGCGTCCCGGGGACAGTTCAGAGAAATCATTTTGTGTGAAGCCAGTTTCC 1660
 QY 2008 TCCGAATGTGTATGCGCGT 2067
 Db 1681 TCCGAATGTGTATGCGCGT 1740

QY 2068 CGTGAACCTGTATGAGGGGTGTGACTTTGTATGTGAGATGTGTGAGGGGATTCCTGTTC 2127
 Db 1741 CGTGAACCTGTATGATGTGGGGTGTGATTTATGTGTGGGACGTGTATAGGGGTTTACGTGTGT 1800
 QY 2128 TGTGTGAACATATTAACCAACAGTGGGGGAGGGTGTGGGCTTTGGCTTCAATGTATTAAT 2187
 Db 1801 TGTGTGAACATATTAACCAACAGTGGGGGAGGGTGTGGGACTTTGGCTTCAATGTATTAAT 1860
 QY 2188 GTGGGAGCTGTGTATATATGATGAATTAATTAAGAGTTTACTCCAGCTTAGTGGCGTGC 2247
 Db 1861 GTAGGGGCTGTGTATATATGATGAATTAATTAAGAGTTTACTCCAGCTTAGTGGCGTGC 1920
 QY 2248 AGTTGTATGTAGAGGCTCTTAACCAATTTCTGTGTATCTGTATTAATTAATTAATGTCTTAC 2307
 Db 1921 AGCTGTATGTAGAGGCTCTTAATCCCTTTCTGTGTATCTGTATTAATTAATTAATGTCTTAC 1980
 QY 2308 CTGTGTGTATTAACAAAGTTTGTATATTAATTAATTAATTAATTAATTAATTAATTAAT 2343
 Db 1981 CTGTGTGTATTAACAAAGTTTGTATATTAATTAATTAATTAATTAATTAATTAATTAAT 2016

RESULT 11
 US-10-187-253A-24
 ; Sequence 24, Application US/10187253A
 ; Publication No. US20030170612A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Pichante, Sergio
 ; APPLICANT: Shyamala, Venkatakrishna
 ; TITLE OF INVENTION: DIAGNOSTIC ASSAYS FOR PARVOVIRUS B19
 ; FILE REFERENCE: CHIR-17194/03US / PP17194.004
 ; CURRENT APPLICATION NUMBER: US/10/187,253A
 ; NUMBER OF SEQ ID NOS: 92
 ; SOFTWARE: Patent Ver. 2.0
 ; SEQ ID NO 24
 ; LENGTH: 2049
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence: NS1 from
 ; OTHER INFORMATION: parovirus B19 clone 2-B1
 US-10-187-253A-24

Query Match 31.4%; Score 1579.6; DB 15; Length 2049;
 Best Local Similarity 85.8%; Pred. No. 0;
 Matches 1753; Conservative 0; Mismatches 289; Indels 0; Gaps 0;
 QY 312 CTTTAACTTAACTAATGAGGCTATTTGCGGGTGTCTGTGACATTTCTCTAATCTTCT 371
 Db 6 CTTTGAAACAAACAAATGAGGCTATTTAGAGGGGTCTTCAAGTTTCTCTAATGTTCT 65
 QY 372 GAGCTGTCTAATGATATCTGT 431
 Db 66 GAGCTGTCTAATGATATCTGT 125
 QY 432 ACCACTTAACCATTTCTAAGATTAATGTGCAATATATTAAGAGAGTGTGTCTTAATCT 491
 Db 126 ACCACTTAACCATTTCTAAGATTAATGTGCAATATATTAAGAGAGTGTGTCTTAAGCT 185
 QY 492 TGAATTTTACGTGGGGGCGCTAGACAGGTGCTTATACCTTTTTCAGGTGAGTGAACAA 551
 Db 186 TGAATTTTACGTGGGGGCGCTAGACAGGTGCTTATACCTTTTTCAGGTGAGTGAACAA 245
 QY 552 ATTGAAGAGGCTATCATATTCATGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 611
 Db 246 ATTGAAGAGGCTATCATATTCATGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 305
 QY 612 CTTAATCTGT 671
 Db 306 CTCAACAGT 365
 QY 672 TGTAAACTTAATTTTGTGCAAGGATGACTCAAAAGAAATTAATTTTGAAGATGAGAGA 731

Db 66 GAGCTGCTAAGCATTAAGTGTGTCTCTTACTGATTTAGACCTTCTGACGGGA 125
 Qy 432 ACCACTTAACCATTTTACAGATTAATGCAATATATTTAGAGAGTGTCTTAACT 491
 Db 126 ACCACTTAACCATTTTACAGATTAATGCAATATATTTAGAGAGTGTCTTAACT 185
 Qy 492 TGAATTTACTGG 551
 Db 186 TGAATTTACTGG 245
 Qy 552 ATTGAGAGAGGCTATCATATCCATGATTAATGATGATGATGATGATGATGAT 611
 Db 246 ATTGAGAGAGGCTATCATATCCATGATTAATGATGATGATGATGATGATGAT 305
 Qy 612 CTTAATCTGT 671
 Db 306 CCTCAAGT 365
 Qy 672 TGTTAATCTTAATTTTGTGAGAGATGATCAAGAGAGAGAGAGAGAGAGAGAG 731
 Db 366 TGTGAAGCTAAATTTTGTGAGAGATGATCAAGAGAGAGAGAGAGAGAGAGAG 425
 Qy 732 GCAATTAATGAGAAATTAATTAATGAGAAATTAATTAATGATGATGATGATG 791
 Db 426 GCAATTAATGAGAAATTAATTAATGAGAAATTAATTAATGATGATGATGATG 485
 Qy 792 AAATTTGACGGGTATATAGACACTGTATTTCCGCTCTTTTCCGAGAGAGCTGTCA 851
 Db 486 TAATTTGATGACATATATATATCTGTATTTCTGTCTATTTAGAAAGGAGCTGTCCA 545
 Qy 852 TGTAAAG 911
 Db 546 TGTCAAG 605
 Qy 912 TACCTGTGAG 971
 Db 606 TACGAG 665
 Qy 972 GTTTCAAG 1031
 Db 666 GTTTCAAG 725
 Qy 1032 ATTAAGTGAATTTTAACTAATATATTTAATGAGAGAGAGAGAGAGAGAGAG 1091
 Db 726 ACTAGTGAATTTTAACTAATATATTTAATGAGAGAGAGAGAGAGAGAGAG 785
 Qy 1092 TCAAG 1151
 Db 786 TCAAG 845
 Qy 1152 CTGTGATACATTAAG 1211
 Db 846 TTTATTTGATACATTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 905
 Qy 1212 ATTAATGATGAG 1271
 Db 906 GTTACTTTGCAAACTATATATATATATATATATATATATATATATATATAT 965
 Qy 1272 CAATAATGATGAG 1331
 Db 966 TAATAATGATGAG 1025
 Qy 1332 AAATTTGAG 1391
 Db 1026 AAATTTGAG 1085
 Qy 1392 TGAATAATTTGATTAATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1451
 Db 1086 TGAATAATTTGATTAATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1145
 Qy 1452 TATTAAGTCACTATTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1511

Db 1146 TATTAAGTCACTATTTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1205
 Qy 1512 AGATCAAG 1571
 Db 1206 AGATCAAG 1265
 Qy 1572 TGGTGAATTTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1631
 Db 1266 TGGTGAATTTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1325
 Qy 1632 AAAG 1691
 Db 1326 AAAG 1385
 Qy 1692 TACAG 1751
 Db 1386 AACAG 1445
 Qy 1752 TGAATAATTTGATTAATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1811
 Db 1446 TGAATAATTTGATTAATGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1505
 Qy 1812 CCCAGATCTTCAAAACCAACCAACCAACCAACCAACCAACCAACCAACCAACCA 1871
 Db 1506 CCCAGATCTTCAAAACCAACCAACCAACCAACCAACCAACCAACCAACCAACCA 1565
 Qy 1872 AACCTGAG 1931
 Db 1566 AACCTGAG 1625
 Qy 1932 CAGTGAAG 1991
 Db 1626 CAGTGAAG 1685
 Qy 1992 CGAG 2051
 Db 1686 CGAG 1745
 Qy 2052 GCTTGCCGATCAGTTTGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2111
 Db 1746 GCTTGCCGATCAGTTTGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1805
 Qy 2112 GGGATGCGCTTTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2171
 Db 1806 GGGATGCGCTTTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1865
 Qy 2172 CCTCATTTGATTAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2231
 Db 1866 CCTCATTTGATTAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1925
 Qy 2232 AGACTAGT 2291
 Db 1926 AGACTAGT 1985
 Qy 2292 TAAATAATGATGAG 2351
 Db 1986 TAAATAATGATGAG 2045
 Qy 2352 AC 2353
 Db 2046 AC 2047

RESULT 13
 US-09-792-630-42
 ; Sequence 42, Application us/09792630
 ; Patent No. US2002016640A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Li, Min
 ; APPLICANT: Dahiyat, Basil I.
 ; TITLE OF INVENTION: BIOCHIPS COMPRISING NUCLEIC ACID/PROTEIN CONJUGATES
 ; FILE REFERENCE: A-70295/RFT/RMS/RMK
 ; CURRENT APPLICATION NUMBER: US/09/792,630

CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 87
SOFTWARE: PatentIn version 3.1
SEQ ID NO 42
LENGTH: 2016
TYPE: DNA
ORGANISM: B19 virus
US-09-792-630-42

Query Match 31.3%; Score 1576; DB 9; Length 2016;
Best Local Similarity 86.4%; Pred. No. 0;
Matches 1741; Conservative 0; Mismatches 275; Indels 0; Gaps 0;

```
QY 328 ATGAGCTATTTCGGGGTGTCTTCACATTTCTCTAACTTCGACGTGCTAATGAT 387
DB 1 ATGAGCTATTTCAGGGGGTCTTCAAGTTTCTCTAATGTTCTGACGTGTGTAAGAT 60
QY 388 AACTGTGTGCTCTAAGCTAGACTAGATATCTTGACCTGGAACTCAATCCATTC 447
DB 61 AACTGTGTGCTCTTACTGATTTAGACATCTTGACCTGGAACTCAATCCATTC 120
QY 448 AACGATTAATGCGAATATTTAAGACGTGTGCTTCTAACTGATTTTCTGGGGG 507
DB 121 AACGATTAATGCGAATATTTAAGACGTGTGCTTCTAAGCTTGAAGTGAAGGCTAT 240
QY 508 CCGTAGCAGGTGCTTATCTTTTTCAGTGGGAATGTAACAAATTTGAGGAAGCTAT 567
DB 181 CCACTAGCGGGTCTTGTACTGATTTTTCAGTGAATGTAACAAATTTGAGGAAGCTAT 240
QY 568 CATATCAGTGTATTTATGTTGTGCTCAGACTAAATGCTAAGAACTTAACTGTGCTA 627
DB 241 CATATCAGTGTATTTATGTTGTGCTCAGGGGGCCAGGGTTAAACCCAGAACTCAAGTGTGTA 300
QY 628 GAAGTTTATTTAATATGTTCTTTACATCTTGTATCTGAAGTGTAACTTAAATTT 687
DB 301 GAGGGGTATTTAATATGTTCTTTATCACTTGTATCTGAAGTGTAAAGCTTAAATTT 360
QY 688 TTGCCAGGATGATCTACCAAGAAATATTTAGAGATGAGAGCAGTTTATGAAT 747
DB 361 TTGCCAGGATGATCTACCAAGAAATATTTAGAGATGAGAGCAGTTTATGAAT 420
QY 748 TACTTAATGAATAAATTCCTTAAATGTTGTGTGTGTGTACAAATTTGACGGTAT 807
DB 421 TACTTAATGAATAAATTCCTTAAATGTTGTGTGTGTGTGTACTAATTTGATGATAT 480
QY 808 ATAGCAGCTGTATTTCCGCTCTTTTTCGAGGAGACCTTGATGCTAATAAGACCCCGC 867
DB 481 ATAGCAGCTGTATTTCTGCTACTTTTGAAGGGGACCTTGATGCTAATAAGACCCCGC 540
QY 868 ATTACTGCAATATACAGACAGTCTACTAATGAATCTGGGAGTCTGAGTGGAGGGGA 927
DB 541 ATTACTGCAATATATATGACATGATGATGCTGGGAGTCTGAGGCAACAGGGGCA 600
QY 928 GATGTTGTGCTATTCGCTGGAAGGGAACAAAGCGGGTAAAGTTTGAACCAATGGA 987
DB 601 GAGGTGTGCTAATTAATGGAAGGGAACCTAAGGCTAAGATTAAGTTTGAACCTAAG 660
QY 988 AATGTGCTATGTAAAAACAGAGTATTTACTGAAGATTAATGAATTTAGTGTATTAAC 1047
DB 661 AACTGTGTGTGAATAACAGAGTGTAAAGAGGATGAGATGTAACCTAGTTGACTTTAAC 720
QY 1048 CAATATATCTTATTAAGTACAGTCAAGTGGCAGCTTCAATTCGAAGGCTTAAAG 1107
DB 721 CAGTATCACTTACTAAGCAGTGTGACAGTGAAGTTTCAAAATTCGAAGGCACTAAA 780
QY 1108 TTAGTATTTATTAAGCTCTAATCTTAAGTACCACTAGTACATTTCTGTATCAATTCAGAC 1167
DB 781 CTAGCAATTTATTAAGCAATTAATTAAGTGTCTTCAAGGCACTAAGAC 840
QY 1168 TTGAGCAGGTACTGTGATTAAGAAATTAATTAATTAATTAATTTGTGTCAAAAC 1227
DB 841 TTGAGCAGGTATGTGTATTAAGCAATTAATTAATTTGTATTAATTTGTGTCAAAAC 900
```

```
QY 1228 TATGATCTCTTTTATGTCGTCAACATGTGTTAAGTGAATGACAAAATGCGTAAA 1287
DB 901 TATGATCTCTTTATGTCGTCAACATGTGTTAAGTGAATGACAAAATGCGTAAA 960
QY 1288 AAAAACAACCTGTGTTTTCAGGGGCAAGTATCTGGAATAAATTTGGCAATGGCT 1347
DB 961 AAAAATACAGTGTGTTTATGAGGCGGCAAGTACAGGAAAACAACTTGGCAATGGCC 1020
QY 1348 ATTCCTAAACTGTACAGATGTATGGAATGTGAATTTGAATAATGAATTTTCCATTT 1407
DB 1021 ATTCCTAAAGTGTTCAGATATATGCAATGTCTTAACTGGAATATGAATACTTTCCATTT 1080
QY 1408 AATGATGACCGGGGAAAAGTTTGTGTGTGCTGGAATGAAGCAATTTAATGCTATAT 1467
DB 1081 AATGATGACAGGGAAGAAAGCTTGTGTGTGCTGGAATGAAGCAATTTAATGCTATAT 1140
QY 1468 GTGAAAGCTGCAAAAGCCATTTTAAAGTGTGCAAGCAACAGGGTATGACAGAAAATGGCT 1527
DB 1141 GTGAAAGCTGCAAAAGCCATTTTAAAGTGTGCAAGCAACAGGGTATGACAGAAAATGGCT 1200
QY 1528 GGCAGTGTGCGAGTGTCCGGTGTGCTGTGTATTAACCAAGATGTGACATTTACATTT 1587
DB 1201 GGAAGTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCT 1260
QY 1588 GTTGTAGTGTATTAACAATACTGATGCTAAGGCTTAAAGGCTTAAAGGAAACGGAATGTA 1647
DB 1261 GTTGTAGGCGGGAACAATACTGATGCTAAGGCTTAAAGGCTTAAAGGAAACGGAATGTA 1320
QY 1648 AAGCTTAACTTTACATTAAGATATGAGCTTCAATGAGTGTATTAACAAGGCTGTATGTA 1707
DB 1321 AAGTAACTTTACATTAAGATATGAGCTTCAATGAGTGTATTAACAAGGCTGTATGTA 1380
QY 1708 CAACAATGCTTACTGTGTATGACAAAGCTGAGGCACTATGAAATCTGGGGAATA 1767
DB 1381 CAACAATGCTTACTGTGTATGACAAAGCTGAGGCACTATGAAATCTGGGGAATA 1440
QY 1768 AACTACATTTGATTTCCCTGGAATTAATGCAATGCTCCTCCAGCCAGATCTCCAAAC 1827
DB 1441 AACTACATTTGATTTCCCTGGAATTAATGCAATGCTCCTCCAGCCAGATCTCCAAAC 1500
QY 1828 ACCCCATTTGCCAGACACAGTATCAGACAGTGTGTGTGAAGTCTGTAAGAACTC 1887
DB 1501 ACCCCATTTGCCAGACACAGTATCAGACAGTGTGTGTGAAGTCTGTAAGAACTC 1560
QY 1888 AGTGAAGCAGCTTTTCAACCTCATCATCTCAGAGGCTTGAAGAGTAAACCCCGGC 1947
DB 1561 AGTGAAGCAGCTTTTCAACCTCATCATCTCAGAGGCTTGAAGAGTAAACCCCGGC 1620
QY 1948 TCTATGTCGCGCGTCCCGGGAACAGATTGAGAGATCAATTTGTGGAAGCCAGTTTCC 2007
DB 1621 TCTATGTCGCGCGTCCCGGGAACAGATTGAGAGATCAATTTGTGGAAGCCAGTTTCC 1680
QY 2008 TCCGAAGTGTAGCGCGTGTGTGGAAGGATTTTAAACGCGGCTTGGCAGTTC 2067
DB 1681 TCCGAAGTGTAGCGCGTGTGTGGAAGGATTTTAAACGCGGCTTGGCAGTTC 1740
QY 2068 CCGGAACCTGTATGAGGCTGTGATCTTGTATGGAATGAGTGTGAGAGGATTTGCCGTTTGC 2127
DB 1741 CCGGAACCTGTATGAGGCTGTGATCTTGTATGGAATGAGTGTGAGAGGATTTGCCGTTTGC 1800
QY 2128 TGTGTGGAACATATTAACAACAGTGGGAGGCTTGGGAGCTTGGCCTCATTTAAT 2187
DB 1801 TGTGTGGAACATATTAACAACAGTGGGAGGCTTGGGAGCTTGGCCTCATTTAAT 1860
QY 2188 GTGGAGCTGTGTATTAATGATGAGTGAATTTAAGAGATTTACTCAGACTAAGTGTGCTGC 2247
DB 1861 GTGGAGCTGTGTATTAATGATGAGTGAATTTAAGAGATTTACTCAGACTAAGTGTGCTGC 1920
QY 2248 AGTGTCAATGAAGAGCTCTAAGCCATTTTGTGTGTAACTTGTAAATTAATTTGTGTAA 2307
DB 1921 AGTGTCAATGAAGAGCTCTAAGCCATTTTGTGTGTAACTTGTGTAACTTGTGTAACTTGTGTAA 1980
QY 2308 CTGTCTGATTAACAAGTTTGTATGATTAATGATTA 2343
```


QY 2068 CGTGAAGTGTAGTAGGGGCTGACTTGTGTATGGATGCTGTAGAGGGATTCCTGTTTGC 2127
 DB 1741 CGTGAAGTGTAGTAGGGGCTGACTTGTGTATGGATGCTGTAGAGGGATTCCTGTTTGC 1800
 QY 2128 TGTGTGGAACATATTAACAACAGTGGGGGAGGGGCTTGGGCTTGGCCCTCATGTATTAAT 2187
 DB 1801 TGTGTGGAACATATTAACAACAGTGGGGGAGGGGCTTGGGCTTGGCCCTCATGTATTAAT 1860
 QY 2188 GTGGAGAGCTTGTATATATGATGGAATTTAGAGAGTTTACTCAGACTTAAAGTGCCTGC 2247
 DB 1861 GTAGGGCTTGTATATATGATGGAATTTAGAGAGTTTACTCAGACTTAAAGTGCCTGC 1920
 QY 2248 AGTTGTATGTAGAGAGCTTAAACCATTTTCTGTGTAACTGTAAATAATGCTTAC 2307
 DB 1921 AGCTGCATGTGGAGAGCTTAAACCATTTTCTGTGTAACTGTAAATAATGCTTAC 1980
 QY 2308 CTGTCTGATTAACAAGTTTGTATGATTTATGAGTAA 2343
 DB 1981 CTGTCTGATTAACAAGTTTGTATGATTTATGAGTAA 2016

RESULT 15
 US-10-080-376-42
 ; Sequence 42, Application US/10080376
 ; Publication No. US20020172968A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Li, Min
 ; APPLICANT: Dai, Yac, Basal I.
 ; TITLE OF INVENTION: BIOCHIPS COMPRISING NUCLEIC ACID/PROTEIN CONJUGATES
 ; FILE REFERENCE: A-70295-2/RFT/RMS/RMK
 ; CURRENT APPLICATION NUMBER: US/10/080,376
 ; PRIOR FILING DATE: 2000-02-19
 ; PRIOR APPLICATION NUMBER: US 09/792,630
 ; NUMBER OF SEQ ID NOS: 87
 ; SOFTWARE: Patentin version 3.1
 ; SEQ ID NO 42
 ; LENGTH: 2016
 ; TYPE: DNA
 ; ORGANISM: B19 virus
 US-10-080-376-42

Query Match 31.3%; Score 1576; DB 14; Length 2016;
 Best Local Similarity 86.4%; Pred. No. 0;
 Matches 1741; Conservative 0; Mismatches 275; Indels 0; Gaps 0;

QY 328 ATGAGGCAATTTGGGGGTCTTGCACATTTCTCTAACAATTCGTGACTGTGTATGAT 387
 DB 1 ATGAGGCAATTTAGAGGGGTCTTCAAGTTCTTCTAATGTCTGAGCTGTCTAAGAT 60
 QY 388 AACTGTGTGTCTCTATGACTAGATTAATTAATCTTGAACGAGGAAACCACTAATCT 447
 DB 61 AACTGTGTGTCTCTTACTGATTTAGACACTTCTGACTGGGAAACCACTAATCTAATCT 120
 QY 448 AACAGATTATGCAATATTTTAAGCAATGTTGCTTGAACCTGATTTTACTGGGGG 507
 DB 121 AATGAGCAATATGCAATATTTTAAGCAATGTTGCTTGAACCTGATTTTACTGGGGG 180
 QY 508 CGCTAGCAGGTGTCTATATCTTTTTCAGTGGATGGAATGAACAATTTGAAGAGGCTAT 567
 DB 181 CCACTAGCAGGGGTCTTGTACTTTTTCAGTGGATGGAATGAACAATTTGAAGAGGCTAT 240
 QY 568 CATATCAGTGTATTTGTGTGTCCAGACTTAAATGCTAGAACTTAACTGTGTGCTA 627
 DB 241 CATATCAGTGTATTTGTGTGTCCAGACTTAAATGCTAGAACTTAACTGTGTGCTA 300
 QY 628 GAAGGTTATTTAATATGTTCTTATACCATCTGTAACTGAAAGTGTAAACTTAAATTT 687
 DB 301 GAAGGTTATTTAATATGTTCTTATACCATCTGTAACTGAAAGTGTAAACTTAAATTT 360
 QY 688 TTGCCAGGATGATCAACAAAGAAATATTTTGAAGATGAGAGAGTTTATGAAGAT 747

DB 361 TTGCCAGGATGATCAACAAAGCAATCTTTAGAGATGAGAGAGTTTATAGAAAC 420
 QY 748 TACTTAATGAAAAAATTCCTTTAAATGTTGTGTGTGTATCAAAATATGACGGGTAT 807
 DB 421 TATTTAATGAAAAAATTAACCTTTAAATGTTGTGTGTGTATCAAAATATGAGATAT 480
 QY 808 ATAGACACTGTATTTCCCGCTTTTTCGCGAGAGAGCTTGTCAATGATTAAGACCCGCG 867
 DB 481 ATAGATACCTGTATTTCTGTACTTTTGAAGGGAGCTTGCATGCAAGCAAAACCCGCG 540
 QY 868 ATTAGCAAAATACAGACAGTGTCTAATGAAATCGGGAGTCTAGCTGTGAGAGGGA 927
 DB 541 ATTAGCAAGCCATTAATGACACTAGTATGATGCTGGGAGTCTAGCGGCAAGGGCA 600
 QY 928 GATGTTGTCATTCCTCGTGAAGGGAACAAAGCGGGGTTAAAGTTCAACATGCTA 987
 DB 601 GAGGTGTGCAATTAATGGAAGGAACTAAGGCTACATTAAGTTCAAACTATGCTA 660
 QY 988 AATGCTATATGAAAAACAGATATTTACTGAAGTAAATGAAATATGATTTTAAAC 1047
 DB 661 AACTGTGTGTGAAAAACAGAGTGTTCAGAGATTAAGTAAATGATGATGATTTAAC 720
 QY 1048 CAATATCTTTAATTAAGTACAGTCAAGTGCAGCTTCAAAATGCAAGTCTTAAAG 1107
 DB 721 CAGTACACTTAACTAAGAGATGTCACAGTGAAGTTTCAAAATGCAAGTCTTAAAG 780
 QY 1108 TTAGCTATTTAATTAAGACTTAACTTAACTGATCCCACTAGTCAATCTTGTATCAAGAC 1167
 DB 781 CTAGCAATTTAATTAAGCACTTAACTTAACTGATCCCACTAGTCAATCTTGTATCAAGAC 840
 QY 1168 TTGAGCAGGTTACTGTCAATTAAGAAATTAATTAATTAATTAATTAATTAATTAAT 1227
 DB 841 TTGAGCAGGTTACTGTCAATTAAGAAATTAATTAATTAATTAATTAATTAATTAAT 900
 QY 1228 TATGATCTCTTTTATGAGGTCACATGTTGTAAGTGTGATGACAAAAATGTGTAA 1287
 DB 901 TATGATCTCTTTTATGAGGTCACATGTTGTAAGTGTGATGATGATGATGATGATGAT 960
 QY 1288 AAAAAACCTGTGTGTTTACGGGCCAACAGTATGTAAGAAACAAATTTGGCAATGGCT 1347
 DB 961 AAAAAACCTGTGTGTTTATGAGGTCACATGTTGTAAGTGTGATGATGATGATGATGAT 1020
 QY 1348 ATTCCTAAAACCTGTGTGTTTATGAGGTCACATGTTGTAAGTGTGATGATGATGATGAT 1407
 DB 1021 ATTCCTAAAACCTGTGTGTTTATGAGGTCACATGTTGTAAGTGTGATGATGATGATGAT 1080
 QY 1408 AATGATGATGAGGGAATGTTGTGTCTGTGATGAAGGATTAATTAAGTCACTAAT 1467
 DB 1081 AATGATGATGAGGGAATGTTGTGTCTGTGATGAAGGATTAATTAAGTCACTAAT 1140
 QY 1468 GTGGAAGCTCAAAAGCAATTTTAAAGTGTGTCAGCCAACTGAGGTGATGAGAAATGGCT 1527
 DB 1141 GTGGAAGCTCAAAAGCAATTTTAAAGTGTGTCAGCCAACTGAGGTGATGAGAAATGGCT 1200
 QY 1528 GGCAGTGTGCAAGTGTGCTGTGCTGTGATTAATGACAGCAATGATGATGATGATGAT 1587
 DB 1201 GGCAGTGTGCAAGTGTGCTGTGCTGTGATTAATGACAGCAATGATGATGATGATGAT 1260
 QY 1588 GTTGTAGTGTATTAATCACTAATGATGATGATGATGATGATGATGATGATGATGAT 1647
 DB 1261 GTTGTAGTGTATTAATCACTAATGATGATGATGATGATGATGATGATGATGATGAT 1320
 QY 1648 AAGCTTAATCTTAAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1707
 DB 1321 AAGCTTAATCTTAAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1380
 QY 1708 CAACATGAGCTTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1767
 DB 1381 CAACATGAGCTTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1440
 QY 1768 AACTACACTTTTGTATTCCTGTGATTAATGATGATGATGATGATGATGATGATGATGAT 1827
 DB 1441 AACTACACTTTTGTATTCCTGTGATTAATGATGATGATGATGATGATGATGATGATGAT 1500

QY 1828 ACCCCATTGTCCAGACACAGATCAGAGAGTGTGTAAGCTCTGAAGACTC 1887
 |||||
 Db 1501 ACCCAATTGTCAAGACACAGATCAGAGAGTGTGTAAGCTCTGAAGACTC 1560
 |||||
 QY 1888 AGTGAAGAGCTTTTTCACCTCATCATCAGAGCCCTGAACAGTGAACCCCGCGC 1947
 |||||
 Db 1561 AGTGAAGAGAGCTTTTTCACCTCATCATCAGAGCCCTGAACAGTGAACCCCGCGC 1620
 |||||
 QY 1948 TCTAGTACGCCGCTCCCGGAGACAGTTCAGAGAAATCATTTGTGGAAGCCAGTTCC 2007
 |||||
 Db 1621 TCTAGTACGCCGCTCCCGGAGACAGTTCAGAGAAATCATTTGTGGAAGCTCAGTTCC 1680
 |||||
 QY 2008 TCCGAGTGTAGCCGCTGTGAGAGAGCTTTTACAGCCGCTTGCAGATCAGTTT 2067
 |||||
 Db 1681 TCCGAGTGTAGCCGCTGTGAGAGAGCTTTTACAGCCGCTTGCAGATCAGTTT 1740
 |||||
 QY 2068 CGTGAACCTGTTAGTGAAGGCTTGAATTGTGAGAGGATTCCTGTTTGC 2127
 |||||
 Db 1741 CGTGAACCTGTTAGTGAAGGCTTGAATTGTGAGAGGATTCCTGTTTGC 1800
 |||||
 QY 2128 TGTGTGAACATATTAACAACAGTGGGGAGGGTTGGGCTTTGCCCTCATTTGATTAT 2187
 |||||
 Db 1801 TGTGTGAACATATTAACAACAGTGGGGAGGGCTTTGCCCTCATTTGATTAT 1860
 |||||
 QY 2188 GTGGAGCTTGTATATATGATGGAATTTAGAGCTTACTCCAGCTTAGTGGCTGC 2247
 |||||
 Db 1861 GTAGGGGCTTGTATATATGATGGAATTTAGAGCTTACTCCAGCTTAGTGGCTGC 1920
 |||||
 QY 2248 AGTTGTCATGTAGAGAGCTCTAACCCATTTTCTGTGTTAAGTTAATAAATGAGCTTAC 2307
 |||||
 Db 1921 AGCTGCCATGTAGAGAGCTCTAACCCATTTTCTGTGTTAAGTTAATAAATGAGCTTAC 1980
 |||||
 QY 2308 CTGTCTGATTTACAAAGTTTGTAGATTATGAGTAA 2343
 |||||
 Db 1981 CTGTCTGATTTACAAAGCTTTGTAGATTATGAGTAA 2016
 |||||

Search completed: April 21, 2004, 16:21:13
 Job time : 1889 secs

THIS PAGE BLANK (USPTO)

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: April 21, 2004, 05:02:03 ; Search time 11673 Seconds

(without alignments)
12862.764 Million cell updates/sec

Title: US-09-555-640-1

Perfect score: 5028
Sequence: 1 gagcgacacgaatgacgt.....acgtcttcctcgtgacgacgc 5028

Scoring table: IDENTITY_NTC
Gapop 10.0 , Gapext 1.0

Searched: 27513289 seqs, 14931090276 residues

Total number of hits satisfying chosen parameters: 55026578

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :

EST:*
1: em_estba:*
2: em_esthum:*
3: em_estin:*
4: em_estnu:*
5: em_estov:*
6: em_estpl:*
7: em_estro:*
8: em_hic:*
9: gb_est1:*
10: gb_est2:*
11: gb_hic:*
12: gb_est3:*
13: gb_est4:*
14: gb_est5:*
15: em_estfun:*
16: em_estom:*
17: em_gss_hum:*
18: em_gss_hiv:*
19: em_gss_pln:*
20: em_gss_vrt:*
21: em_gss_fun:*
22: em_gss_mam:*
23: em_gss_mus:*
24: em_gss_pro:*
25: em_gss_rod:*
26: em_gss_png:*
27: em_gss_vrl:*
28: gb_gss1:*
29: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
C 1	69.4	1.4	712	13	BX416727 BX416727
C 2	68.4	1.4	1101	29	CNS003921 Drosophila
C 3	56	1.1	1201	9	AL532464 AL532464
C 4	55	1.1	1201	13	BX461824 BX461824

C 5	54.2	1.1	1101	29	CNS00LT2
C 6	53.6	1.1	1201	13	BX356851
C 7	53	1.1	1099	13	BX456575
C 8	51.8	1.0	1201	13	BX379650
C 9	51.8	1.0	1613	28	BZ575046
C 10	51.6	1.0	968	13	BX415693
C 11	51	1.0	994	13	BX414650
C 12	50.8	1.0	876	29	CNS008BK
C 13	50.8	1.0	1001	29	CNS007BE
C 14	50.6	1.0	1124	13	BX36282
C 15	50.2	1.0	1101	29	CNS00EVL
C 16	50.2	1.0	1201	29	CNS016BL
C 17	49.6	1.0	829	29	CNS011NU
C 18	49.6	1.0	1201	9	AL559324
C 19	49.4	1.0	414	28	AQ798260
C 20	49.2	1.0	1101	29	CNS0182P
C 21	49	1.0	1141	28	CC209484
C 22	48.8	1.0	257	29	CNS00JOP
C 23	48.8	1.0	928	29	CNS00DKY
C 24	48.8	1.0	979	29	CNS00DPH
C 25	48.8	1.0	1163	13	BX415221
C 26	48.4	1.0	389	29	AG226274
C 27	48.4	1.0	677	28	BH685106
C 28	48.4	1.0	1101	29	CNS003B6
C 29	48.4	1.0	1201	13	BX361615
C 30	48.2	1.0	1007	29	CNS00KX8
C 31	48.2	1.0	1133	13	BX422748
C 32	48.2	1.0	1151	29	CNS024TU
C 33	48	1.0	750	29	CG823001
C 34	47.8	1.0	652	28	BZ515984
C 35	47.8	1.0	712	13	BX416727
C 36	47.8	1.0	755	28	BZ502267
C 37	47.8	1.0	780	28	BZ061381
C 38	47.8	1.0	835	28	BH675700
C 39	47.8	1.0	1101	29	CNS00JUL
C 40	47.6	0.9	625	28	BZ489847
C 41	47.6	0.9	1200	13	BX457423
C 42	47.4	0.9	718	29	CE746255
C 43	47.4	0.9	1125	13	BX36449
C 44	47.2	0.9	885	13	BX425603
C 45	47.2	0.9	1080	29	CNS00DEP

ALIGNMENTS

RESULT 1
LOCUS BX416727/c 712 bp mRNA linear EST 15-MAY-2003
DEFINITION BX416727 Homo sapiens NEUROBLASTOMA Homo sapiens cDNA clone
CS0DA011Y14 5-PRIME, mRNA sequence.

ACCESSION BX416727
VERSION BX416727.1 GI:30765629

SOURCE Homo sapiens (human)

ORGANISM

REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: segre@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. Contact: Feng Liang Email: fliang@life.com URL:
http://fulllength.invitrogen.com/InvitrogenCorporation1600
Faraday Avenue Genoscope sequence ID: CS0DA011B507QPI.

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

Genoscope

BP 191

EVRY cedex

France

Library

was constructed

by Life Technologies,

a division of

Invitrogen. Contact:

Feng Liang Email:

fliang@life.com URL:

http://fulllength.invitrogen.com/InvitrogenCorporation1600

Faraday Avenue Genoscope sequence ID: CS0DA011B507QPI.

Location/Qualifiers

1. 712

/organism="Homo sapiens"

```

FEATURES
    source
        and how to order individual BAC clones, the entire library, or
        filters for hybridization from the BACPAC Resource Center can be
        found at http://bacpac.med.buffalo.edu/drosophila\_bac.htm
        location/Qualifiers
            1. 1101
                /organism="Drosophila melanogaster"
                /mol_type="Genomic DNA"
                /db_xref="taxon:7227"
                /clone="BACR08K10"
                /clone_1db="RPCL-98"

```

```
/note="end : TEST3"
```

195

ATA 571

103

22

• •

1
2
3
4
5

769

SDK 912

ACT 751

ITW 852

AG 811

RD 792

071 071

[illegible]

70

DK 6/5

IT 991

KT 615

AT 1051

WA 555

1111

•

100

455

NY-2003

```

KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT

EST.
Homo sapiens (human)
Homo sapiens
Mammalia; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1201)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
On Feb 13, 2001 this sequence version replaced gi:12795957.
Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: secrete@genoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. Contact : Feng Liang Email : filiang@lifetech.com URL :
http://fulllength.invitrogen.com/InvitrogenCorporation 1600
Faraday Avenue Genoscope sequence ID : CS0DM012DG05NP1.
Location/Qualifiers
1. 1201
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CS0DM012YN10"
/tissue_type="FETAL LIVER"
/dev_stage="fetal"
/clone_1fb="Homo sapiens FETAL LIVER"
/note="Organ: liver; Vector: pCMVSPORT 6; 1st strand cDNA
was primed with a NotI-oligo(dT) primer. Five primer end
enriched, double-strand cDNA was digested with Not I and
cloned into the Not I and EcoRV sites of the pCMVSPORT 6
vector. Library was not normalized."

```

[illegible]

TITLE	JOURNAL	COMMENT
Full-length cDNA libraries and normalization	Unpublished (2001)	
Genoscope - Centre National de Sequencage	BP 191 91006 EVRY cedex - France	
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr		
Email: seqref@genoscope.cns.fr		
was not normalized. Library was constructed by Life Technologies, a		
division of Invitrogen. This sequence belongs to sequence cluster		
8170.r For more information about this cluster, see		
http://www.genoscope.cns.fr/		
cgi-bin/cluster.cgi?seq=CSODF034BA04QPI&cluster=8170.r. Contact :		
Feng Liang Email : fliang@lifetech.com URL :		
http://fulllength.invitrogen.com/Invitrogen Corporation 1600		
Paradise Avenue Genoscope sequence ID : CSODF034BA04QPI.		
Location/Qualifiers		
1. 1201		
/organism="Homo sapiens"		
/mol_type="mRNA"		
/db_xref="taxon:9606"		
/clone="CSODF034BA08"		
/tissue_type="FETAL BRAIN"		
/dev_stage="fetal"		
/clone_id="Homo sapiens FETAL BRAIN"		
/note="Organ: brain; Vector: pCMVSORT 6; 1st strand cDNA		
was primed with a NotI-clio(47) primer. Five primed and		
enriched, double-strand cDNA was digested with Not I and		
cloned into the Not I and EcoRV sites of the pCMVSORT 6		
vector. Library was not normalized."		

[illegible]

KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
AUTHORS 1 (bases 1 to 1099)
TITLE Li, W.B., Gruber, C., Jesse, J., and Polayes, D.
JOURNAL Full-length cDNA libraries and normalization
COMMENT Unpublished (2001)
Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: sequef@genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. Contact: Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/Invitrogen Corporation 1600
Faraday Avenue Genoscope sequence ID: CS0CAP02DB020PL
Location/Qualifiers
1. 1099
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CS0CAP02YD04"
/issue_type="THYMUS"
/clone_lib="Homo sapiens THYMUS"
/note="Vector: PCMVSPORT 6; 1st strand cDNA was primed
with a NotI-oligo(dT) primer. Five prime end enriched,
double-strand cDNA was digested with Not I and cloned into
the Not I and EcoRV sites of the PCMVSPORT 6 vector.
Library was not normalized."

FEATURES
source

ORIGIN

Query Match 1.1%; Score 53; DB 13; Length 1099;
Best Local Similarity 27.1%; Pred. No. 0.11;
Matches 191; Conservative 177; Mismatches 323; Indels 14; Gaps 2;
607 AGAAGCTTAAGTGTGCGAGAGAGTTTAAATATGTTCTTACATCTTGTACT 666
1094 AAAATKAKAAAAMKAKADAMADDDKATAMKATADADADAMATTKKDDAMK 1035
667 GAAAGTGTAACTTAATTTTCCAGGAGTACCAAGAAATTTTAAAGAT 726
1034 ADAMTAKTKKATKATDDDDKDDKDDKADAKKADKADKADKADKADKADK 975
727 GGAGACAGTTTATAGAAATTTCTTAATGAAAAATCTTAAATGTGTGTGT 786
974 AKAAKAKKGTAAATKGTATATATATATATATATATATATATATATATAT 915
787 GTAAACAATTTGACGGGTATATAGACCTGATATTTCCGCTTTTCCGAGGAG 846
914 DAAAT 855
847 TGTCAATGCTAAAGACCCGATTAATGCAATATAGACAGCTACTAATGAATGG 906
854 ATWDTTTAAADAAAAAAMRAATTTKRAMWKARAKADADADADADADADATKR 795
907 GAGCTAGCTGTGAGAGGAGAGATGTGTGCTGCTGCTGCTGCTGCTGCTGCTG 966
794 GTKDRADAKKGGARAKKGRAMKTKKGAARARARARARARARARARARAR 735
967 TTAAGTTCAACATGTAATTTGGCTATGTGAAGAGAGATATTTAGAGATAA 1026
734 KTKGAATATAATGATTTGGGARKGTGGAARARARARARARARARARARAR 682
1027 TGAAGTTAGTATTTAAACAATATATTTTAAAGTACAGTCAAGTGCAGCTTT 1086
681 GTAAAAAATGATTTGAAAAAARGAAGGRRARARARARARARARARARAR 629
1087 CAATTCAGAGTGTGCTTAAAGTATTTATTAAGTACTAATTAATTAATTAAT 1146
628 AAAAATGAAATATATATTTTGAATGAAATTTTATTAATGATTTTGTGTTAD 569
1147 ACATTTCTTTTACATTCAGACTTTGAGCGTTACTTGAATTAAGAAATTAAT 1206

Db 568 GTAAATGADAAATAATADKTTTATATATATATATATATATATATATAT 509
Qy 1207 AATATTTATTTGTCGCAACATATGATCTCTTATAGTGGTCAACATGTTAAGTGG 1266
Db 508 DAWTAAATTTTTTTTTTTTTTTTGAARASAAKTTTGTGTGTGTCGCAATGATGC 449
Qy 1267 ATTGACAAAATATGCTGTAATAAACCACCTGTGTTTACGGG 1311
Db 448 AGTGAATATATATTTTGTATTAATGAASCTGCTGTTTGTG 404

RESULT 8
BX379650/ 1201 bp mRNA linear EST 08-MAY-2003
LOCUS BX379650 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens cDNA
DEFINITION clone CS0D1036YF11 3-PRIME, mRNA sequence.
ACCESSION BX379650.1 GI:30450783
VERSION BX379650
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
AUTHORS 1 (bases 1 to 1201)
TITLE Li, W.B., Gruber, C., Jesse, J., and Polayes, D.
JOURNAL Full-length cDNA libraries and normalization
COMMENT Unpublished (2001)
Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: sequef@genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 1281.f For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CS0D1036C06NP1a;cluster=1281.f. Contact :
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/Invitrogen Corporation 1600
Faraday Avenue Genoscope sequence ID: CS0D1036C06NP1.
Location/Qualifiers
1. 1201
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CS0D1036YF11"
/issue_type="PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="1st strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and EcoRV sites of the PCMVSPORT 6 vector. Library was normalized."

ORIGIN

Query Match 1.0%; Score 51.8; DB 13; Length 1201;
Best Local Similarity 33.2%; Pred. No. 0.22;
Matches 83; Conservative 61; Mismatches 106; Indels 0; Gaps 0;
1177 GTTACTGATTAAGAAATATATATATATATATATATATATATATATATAT 1236
Db 1052 DWWWWDAATTTTAAAAAAMWMAAATTTTAAATTTTAAATTTTAAATTTTAA 993
Qy 1237 CTTTATGTTGCTCAACATGTTTAAAGTGTGATGACAAAATATGCTAATAAACACC 1296
Db 992 GGGGAGTTTAAARADANKTTTATGATGAGGRRRATTTGKRAAARAAAAATKTT 933
Qy 1297 CTGTGTTTAAAGCCCAACATGTTGCAAAATTTTGGCAATGCTATTTGCTAA 1356
Db 932 TAAATTTTAAATTTTAAAAAARARARARARARARARARARARARARARAR 873
Qy 1357 ACTGTACAGTGTATGAAATGCTAATTAATGAATTAATTAATTAATTAATTA 1416
Db 872 RAAABADATGAGDGGGGGAGGAGGAAATTTAAAGGAAATATATATATATAT 813

Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster 6015.f
Contact : Feng Liang Email : fliang@lifetech.com URL :
<http://fulllength.invitrogen.com/Invitrogen/Corporation/1600>
Faraday Avenue Genoscope sequence ID : CS0CAP001D01NP1.

FEATURES

source

1. .994
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CS0CAP001YN02"
/issue_type="THYMUS"
/clone_lib="Homo sapiens THYMUS"
/note="Vector: pCMVSPORT 6; 1st strand cDNA was primed with a NotI-oligo (dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoRV sites of the pCMVSPORT 6 vector.
Library was not normalized."

ORIGIN

Query Match 1.0%; Score 51; DB 13; Length 994;
Best Local Similarity 20.9%; Pred. No. 0.34;

Matches 76; Conservative 137; Mismatches 150; Indels 0; Gaps 0;

```

QY 1107 GTTAGCTATTATTAAGCTACTAAGTACCACTAGTACATCTTGTATCATTCAGA 1166
DB 980 KDWANWAAADKMAARBRWAGAAARARADWADWAAWMDRWTWMAAKKKMADWTT 921
QY 1167 CTTTGAGCAGGTTACTGCTATTAAGAAATTAATTAATTAATTAATTAATTAATTA 1226
DB 920 TKTTKKADADWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMD 861
QY 1227 CTATGATCCTCTTTTGTAGTGGTCAACATGTTTAAAGTGGATGACAAAATGTGTA 1286
DB 860 KADADDDATKTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCTTTTCT 801
QY 1287 AAAAAACACCTGCTGTTTACGGGCGACCAAGTACGAAATTTGGCAATGGC 1346
DB 800 AAAAAAADAADWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMDWMD 741
QY 1347 TATGCTAAACTGTACAGTGTATGATGATGATGATGATGATGATGATGATGATGAT 1406
DB 740 ADAAGDKARAAWMDGAGRDKDRDWAARWMDADAAARAAATTAATTAATTAATTAAT 681
QY 1407 TAATGATGTAGCGGAAAGATTGTGCTGTGAGTGAAGGCTTTTAAATGCTCAAT 1466
DB 680 WAAAAAAMDATKAGRKDARDWMAATTTTCTTTTCTTTTCTTTTCTTTTCTTTTCT 621
QY 1467 TGT 1469
DB 620 TTT 618

```

RESULT 12
CNS008BK
LOCUS
DEFINITION
Drosophila melanogaster genome survey sequence T7 end of BAC #

BACR16N02 of RPL1-98 library from Drosophila melanogaster (fruit fly), genomic survey sequence.

AL051466.1 GI:4933520

SSS.

Drosophila melanogaster (fruit fly)

Drosophila melanogaster

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;

Ephydroidea; Drosophilidae; Drosophila.

1 (bases 1 to 876)

Genoscope.

Direct Submission

Submitted (02-JUN-1999) Genoscope - Centre National de Sequencage ;

BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr

- Web : www.genoscope.cns.fr)

COMMENT

Determination of this BAC-end sequence was carried out as part of a collaboration with the Berkeley Drosophila Genome Project (BDGP). The BDGP is constructing a physical map of the Drosophila melanogaster genome using these BACs. For further information please see <http://www.fruitfly.org> The BDGP Drosophila melanogaster BAC library was prepared by Kazuo Osoegawa and Aaron Mammoler in Pieter de Jong's laboratory in the Department of Cancer Genetics at the Roswell Park Cancer Institute in Buffalo, NY. The library is named RPL1-98 and was constructed by partial EcoRI digestion of Drosophila DNA provided by the BDGP from the isogenic strain y2; cn bw sp, the same strain used for the BDGP's pl and EST libraries. A more detailed description of the library and how to order individual BAC clones, the entire library, or filters for hybridization from the BACPAC Resource Center can be found at http://bacpac.med.buffalo.edu/drosophila_bac.htm.

FEATURES

source

1. .876
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/clone="BACR16N02"
/clone_lib="RPL1-98"
/note="end : T7"

ORIGIN

Query Match 1.0%; Score 50.8; DB 29; Length 876;
Best Local Similarity 36.0%; Pred. No. 0.38;

Matches 111; Conservative 59; Mismatches 134; Indels 4; Gaps 1;

```

QY 4599 CAGATCAAAAGCAACACACAGACGATATGAAAAGCTGAAGATTTGACCTGCA 4658
DB 571 CAATGCGAGAAATTAACACTTAATBTTCGTGCTACACACTAISTAGSCTN 630
QY 4659 AAGCGGTGACCACTGTAATTCCTCCACCGTCTCAGCAGAACCGTCACC 4718
DB 631 ATTACTCTCTCCACAAACAAATSYTSCCACTATTCCTCCATCTTCCSACTA 690
QY 4719 CACCGCCACCTGTGCGCCGACATATATATGCCCCCTCCATATCCCGTACGACCA 4778
DB 691 YTTTATATTSCTT---CCAAAACAAATCTCTCTSSSSSTSSSTSSSTSSSTAW 746
QY 4779 TCTATTAAGATGACAGACGCTGTAGATTAATTAATTAATTAATTAATTAATTAAT 4838
DB 747 TTTWATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 806
QY 4839 ATTAAGATGCTAAGATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 4898
DB 807 ATAAKTGSMWTSATTTATTTGTCTATTTTANATATWABRAAAATTAATTAATTA 866
QY 4899 AATTAATTC 4906
DB 867 SAGCADB 874

```

RESULT 13

CNS007BE/c

LOCUS

DEFINITION

Drosophila melanogaster genome survey sequence TET3 end of BAC

BACR15H4 of RPL1-98 library from Drosophila melanogaster (fruit fly), genomic survey sequence.

AL066953

SSS.

Drosophila melanogaster (fruit fly)

Drosophila melanogaster

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;

Ephydroidea; Drosophilidae; Drosophila.

1 (bases 1 to 1001)

Genoscope.

Direct Submission

Submitted (02-JUN-1999) Genoscope - Centre National de Sequencage ;

BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr

JOURNAL

AUTHORS
TITLE
JOURNAL

Genoscope.
Direct Submission
Submitted (02-JUN-1999) Genoscope - Centre National de Sequencage :
BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
- Web : www.genoscope.cns.fr)

COMMENT

Determination of this BAC-end sequence was carried out as part of a
collaboration with the Berkeley Drosophila Genome Project (BDGP).
The BDGP is constructing a physical map of the Drosophila
melanogaster genome using these BACs. For further information
please see <http://www.fruitfly.org/TheBDGP/Drosophila>
melanogaster BAC library was prepared by Kazuo Ooegawa and
Aaron Mammose at the Roswell Park Cancer Institute in Buffalo,
NY. The library is named RPCI-98 and was constructed by partial
EcoRI digestion of Drosophila DNA provided by the BDGP from the
isogenic strain y2; cn bw sp, the same strain used for the BDGP's
P1 and EST libraries. A more detailed description of the library
and how to order individual BAC clones, the entire library, or
filters for hybridization from the BACPAC Resource Center can be
found at http://bacpac.med.buffalo.edu/drosophila_bac.htm.

FEATURES

source

1.1101
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/clone="BACR29B23"
/clone_1b="RPCI-98"
/note="end : T7"

ORIGIN

Query Match 1.0%; Score 50.2; DB 29; Length 1101;

Best Local Similarity 34.5%; Pred. No. 0.55; Mismatches 237; Indels 1; Gaps 1;

Matches 162; Conservative 69; Mismatches 237; Indels 1; Gaps 1;

QY 948 AAGGAGCAACGCGGTTAAAGTTCAACCATGTAATGCTATGTAAGAAACAG 1007
DB 538 AAAAAAAAAATTTAAAWAAATTAATTAATTAATTAATTAATTAATTAATTAAT 597
QY 1008 AGATTTTACGAGATTAATGGAATTAAGATTTTAACCAATATCTTATTAAGTAG 1067
DB 598 WTWATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 657
QY 1068 CAGTCACAGTGCGAGCTTCAAAATTCAGAGCGCTTAAGCTTATTAATTAAGCTAC 1127
DB 658 TAAATTAATTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 717
QY 1128 TAACTTAGTACCACTAGTACATTCCTTGTATCACTTGAAGCGAGTACTTGCAAT 1187
DB 718 TAAATTAATTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 777
QY 1188 TAAAGAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 1247
DB 778 WAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 837
QY 1248 TCAACATGTGTAGGTGATGACAAATTAATTAATTAATTAATTAATTAATTAATTA 1307
DB 838 ATAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 896
QY 1308 CGGCGCAACCAAGTACGTAAGAAATTAATTAATTAATTAATTAATTAATTAATTA 1367
DB 897 AATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 956
QY 1368 GTATGATGATGATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 1416
DB 957 WTATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 1005

Search completed: April 21, 2004, 15:44:16.
Job time : 11682 secs

THIS PAGE BLANK (USPTO)